

THE CULTIVATOR:

A CONSOLIDATION OF BUEL'S CULTIVATOR AND THE GENESEE FARMER.

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THE CULTIVATOR.

"TO IMPROVE THE SOIL AND THE MIND."

TO THE PUBLIC.

THE publisher of *The Cultivator* informs the friends and patrons of that journal, that it is his intention, at the commencement of the next volume in January next, to make such improvements in the mechanical execution of the paper, as can be effected by new type and a new and improved steam press, purchased expressly for its use. Of the character of the *Cultivator* it can scarcely be necessary to speak, at this time and place. From its commencement it has taken the highest place in the list of journals devoted to the cause of the farmer; and in its series of volumes, forms perhaps the best agricultural library of the day. Its numerous and increasing list of contributors, unrivaled in extent and ability—the ample means in the power of the editors to give the most early and complete record of every thing that can interest the farmer, or aid in forming a correct opinion of the condition and progress of agriculture, and its extensive circulation, exceeding that of any similar journal in the world, has caused it to be looked upon as the principal exponent of agriculture in the country. In the amount of agricultural reading—in its numerous and effective engravings and illustrations, and in its unwearied efforts to inform the mind and elevate the condition of the farmer, no efforts will be spared to make the next vol. superior to any that have preceded it.

At the same time, the proprietor of the *Cultivator* will issue a new paper, to be called

THE FARMER'S MUSEUM.

It will be printed in the same condensed and beautiful manner as the *Cultivator*, but will contain only 16 octavo pages, or one-half the quantity of the former.

Public opinion seems to have decided that a 50 cent paper is necessary; and from all parts of the country the proprietor of the *Cultivator* has been urged to undertake the publication of such a journal. The favor with which the Monthly *Genesee Farmer* was viewed, the great good it was accomplishing, and the extensive circulation it had attained, while conducted by him, is considered a proof that a similar cheap publication, made up from the ample pages of the *Cultivator*, and practically adapted to the wants of the thousands whose moderate means prevent the receipt of more expensive journals, will be hailed as a desideratum by the farming public.

By an examination of the terms annexed, it will be seen they are such as is believed will make it an inducement for individuals to act as agents in procuring subscribers to these works. There is scarcely a neighborhood, or town, in which an active person, interested in the cause of agriculture, may not in a short time obtain from 20 to 100 subscribers; and we would suggest that there are hundreds of young men, who might spend

in this way a few days or weeks, with greater profit to themselves, and perhaps more advantage to others, than in almost any other. Our numerous friends and subscribers in all parts of the Union and the Canadas, are respectfully requested to aid the cause of agriculture, by bringing the contemplated change in the old, and the establishment of our new publication, to the notice of their neighbors. Postmasters, and others, who have heretofore so kindly interested themselves in our behalf, will add greatly to their present claims on our gratitude, by continuing to receive and forward the names of those who may wish to become subscribers. The many Editors with whom we exchange, will greatly oblige us by calling the attention of their readers to our new arrangements. As no means, or expense, will be neglected to sustain the present high reputation of the *Cultivator*, and render the *MUSEUM* worthy a place in the home of every farmer, and as the terms adopted are such that an extensive circulation only can afford remuneration for either, it is hoped an early and cheerful response will be made to this appeal, and a list of subscribers forwarded, such as it is believed these journals will deserve.

TERMS OF THE CULTIVATOR.

Single copy \$1.00—Seven copies for \$5.00—Fifteen copies for \$10.00.

TERMS OF THE FARMER'S MUSEUM.

The *Museum* will be printed on a sheet just one-half the size of "The *Cultivator*," 16 pages, large octavo. Single copies 50 cents—Fourteen copies for \$5.00—Thirty copies for \$10.00.

All subscriptions must commence with the vol. at the commencement of each year; and all orders must be accompanied with the money, and come free of postage; as the exceedingly low rates at which the papers are published, forbid the risk and loss heretofore sustained by crediting the paper to Agents.

A specimen number of the *FARMER'S MUSEUM*, together with Prospectuses for both our papers, will be issued and forwarded to our friends about the middle of this month, and we shall also be glad to forward them to any one disposed to aid us in our efforts by promoting the circulation of either of our papers.

MONTHLY NOTICES.

COMMUNICATIONS received during the last month:—Sanford Howard, A Subscriber, S. W. Jewett, J. S. Skinner, E. W. Brewster, L. A. Morrell, Wm. Jennison, D. O. Prouty, J. W. G., E. G. Johnson, T. C. Peters, K. L., C. K., Editor *Farmer's Encyclopedia*, Georgius, C. J. Ryan, A Farmer, M. Adams, G. D. Strother, Thomas Affleck.

ACKNOWLEDGMENTS.—We are indebted to Maj. E. KIRBY, Brownsville; O. PALMER, Buffalo; T. C. PETERS, Darien; F. J. BETTS, Esq. Newburgh; JAMES GOWEN, Esq. and J. PEDDER, Philadelphia; J. S. SKINNER, Esq. Washington City; J. R. SPEED, Caroline; W. RISLEY, Fredonia; Dr. J. P. BECKMAN, Kinderhook; S. HOWARD, Zanesville; and LEVI DURAND, Derby, for various pamphlets and papers, containing accounts of Cattle Shows, Ag. Addresses, &c. In our next, we will endeavor to give such notices and extracts from these papers as our limits will admit. In the meantime we shall be glad to receive from our friends in all sections of the country, copies of papers containing accounts of Cattle Shows and Addresses before Ag. Societies.

We are indebted to our friends in London, for our usual files of the *Mark Lane Express*, the *Farmer's Journal*, the *Farmer's Herald*, *Farmer's Magazine*, &c.; and to G. W. ATWOOD, American produce commission dealer, No. 1 London st., Mark Lane, for his monthly circular, and for several nos. of the *London Times*, containing articles of interest on the subject of agriculture.

The package from R. Sinclair, Jr. & Co., Baltimore, has come to hand. We shall make use of some of the articles in our next.

AGE OF CATTLE.—M. E. W. is referred to the first page of our last no. for an explanation of the remarks to which he alludes.

Lansingville can obtain the grass seed he wants, of Wm. Thorburn, seedsman, of this city, at about \$2.00 per bushel.

THE CULTIVATOR ALMANAC.—We can hereafter only supply orders for this Almanac with astronomical calculations for New-York city. Another year we shall endeavor to print enough to supply all demands from every section. 28,000 copies have been sold in the last two months.

EARLY CALF.—A subscriber at Jordan, in this state, in a late letter, says—"I have a fine grade Durham, that

had a fine heifer calf the 13th of May last, being at that time only 13 months and 14 days old. Both are doing finely."

The journal to which we alluded in our notices for the month of September, has, in its issue for October, occupied some two or three pages in an attempt at a reply to our brief remarks. We find in it nothing to induce us to alter the determination expressed by us. The reply is written in the querulous dissatisfied tone of a man who stands self-convicted of serious error or wilful misrepresentation, and who finds his positions at variance with fact, common sense, and public opinion. What else could induce him to persist in misrepresenting us, as he now does, when he says—"The *Cultivator* asserts that the reputation of being good milkers does not belong to the Short Horns;" when what we actually said was this: "The old Short Horns were the best milking breed in England—a reputation which, as a whole, certainly does not belong to the improved breeds." We think the editor greatly underrates the discernment of his intelligent readers, if he supposes they are not able to see a great difference between saying that a breed, as a whole, is not the "best" for milk, or saying that it is not "good." For the fact as stated by us, every well informed breeder knows that we have the highest and most positive English authority; and the reason for this state of things, we gave in full, in our July article.

We may here state that the opinions put forth by us in that paper, as to the actual value and great importance of the Short Horns as a base for the improvement of our stock, and the best method of effecting such improvement, have received the approval, so far as we have learned, of every practical breeder in the country. We have room for only the following extracts from the many communications we have received relating to this matter. In regard to the charge that the *Cultivator* was inimical to the Short Horns, one of the most extensive breeders and owners of this stock in the U. States, says: "The only jealousy I have ever felt on the subject, was that the *Cultivator* might be considered too partial to them;" and as to the effect of crosses in the improvement of stock, a gentleman who has been, and is now, largely engaged in breeding both pure bloods and grades, says: "The ground you have assumed is the true one, and cannot be shaken; it is borne out by common sense, and the practical experience of thousands."

MULTICOLE RYE.—James Magoffin, Esq. of St. Stephens, Alabama, states in a letter to the American Farmer, that he recently conversed with a gentleman lately from France, who informed him that the account of the Multicole Rye given in our Aug. no. is perfectly correct, and that its value to the farmer is truly great. Will not some of our seedsmen import some of the seed?

MAPLE SUGAR.—We have been favored with the sample of the maple sugar for which the first premium was awarded at the late State Fair, by Mr. JOEL WOODWORTH of Watertown, Jefferson co., the manufacturer. It far exceeds any we have before seen, both on account of its whiteness, approaching to best refined loaf sugar, and in excellence of grain and flavor. No premium awarded at the Fair was better deserved. We shall hereafter give Mr. W.'s statement of the manner in which it was made.

THREE FURROW PLOW.—We were recently invited by the inventor, Mr. C. THORPE of Binghamton in this state, to examine a "three-furrow plow," he has the past season brought into use in Broome county. It is intended mainly for a seed coverer, for which we should think it would answer an excellent purpose. It may, however, be used as a common plow on light soils, where a greater depth than four or five inches is not required. In the arrangement of the plows, and the facility with which it may be guided, it is superior to anything we have seen. We shall endeavor to give an engraving of it hereafter.

CORN HILLER.—Mr. THORPE also showed us an implement which he calls by this name, calculated for plowing and hilling any kind of hoed crops by once running between the rows.

KENTUCKY CORN.—We see it stated in the western papers, that Gov. Shelby of Kentucky, has a field of 100 acres in corn, which it is estimated will yield at least 100 bushels per acre. The corn is planted four feet apart each way, and four stalks in each hill. This would be the same as drills 4 feet apart, and the stalks 1 foot apart in the drills. The crop of the Messrs. Pratts, of Madison, was in drills five feet from center to center, each drill containing three rows of single stalks, two feet distant from each other. The yield was 170 bushels per acre. Much is yet to be learned as to the best manner of cultivating this great crop. [For continuation of these notices, see page 183.]

TRANSACTIONS OF THE FIRST NEW-YORK AGRICULTURAL SOCIETY.

We have lately re-examined the volumes published by this Society, and have been surprised at the mass of valuable facts the distinguished men engaged in its support, were at that period able to accumulate and publish. No farmer can take up these volumes without at once perceiving the vast debt we owe to the Livingstons, De Witts, L'Honniedieus, Clintons, Mitchells, &c. &c., who formed the first association for the promotion of agriculture in this state, and in the expenditure of labor and money did so much to elevate the art to its proper place. As proposed in a late number of the Cultivator, we shall give brief notices of some of the most important papers to be found in the series.

In the first vol. page 71, is to be found a paper on the *Hessian fly*, and much as has been written on the subject since, very little addition has been made to the mass of information contained in this paper. It is from the pen of J. N. Havens, Esq. Mr. Havens' statements agree with our experience and observations, viz: that the fly undergoes in most cases two transformations, or becomes a perfect insect twice a year, depositing its eggs both fall and spring. The egg laid in the fall sown wheat is hatched, and the insect remains in the chrysalis state through the winter. In the spring it emerges a perfect insect, and from the eggs then deposited, are produced the insects which are ready to attack and destroy the fall wheat. Burning the stubble, or plowing it under carefully and deeply, is recommended by Mr. H. Burning we have not tried, but deep plowing the stubble immediately after harvest, we know to have a good effect.

It is to the experiments of Chancellor Livingston upon *Gypsum*, their varied nature, and the uniform success that attended them when made in connection with clover, that we are mainly indebted for the revolution and improvement in agriculture consequent on the clover and plaster-husbandry. The paper in which he records his experiments, commencing in 1789, is one of the most interesting in the volume. The inferences to which the Chancellor was led, viz: that plaster produces the best effect when used in connection with clover—that it is comparatively useless on wet moist soils—that its action is very little aided by the natural fertility of the soil—that on dry soils it is of great value to Indian corn—and that in most cases it produces no effect near the sea, are such as experience has confirmed. From some of his experiments he was led to infer that 8 bushels of pulverized limestone was equal in effect to 6 bushels of gypsum, but on clover, we are confident the disproportion would be found far greater than this.

The paper of Mr. L'Honniedieu, on the *Preparation of Manures*, contains many hints that could scarcely fail of improving the practice of our best farmers. His remarks on composts made of turf and barnyard manures, swamp mud, leached ashes, &c., are so much in advance of the age in which they were written, that they seem rather to have been penned by a contemporary of Liebig and Dana.

At the time this volume was prepared, the growing and preparation of *Clover Seed* for market, was much less common than it now is, and Suffolk, on Long Island, produced and sold more than all the rest of the state. Mr. L'H. gives a paper on gathering and threshing it, from which it appears in the modern mode of threshing and cleaning by water or horse power, a vast saving of labor has been effected. Mr. L'H. says the greatest quantity he has known grown on an acre, was four bushels and sixteen quarts. Such a product as this, any where, would be considered enormous.

In this volume is an account of a crop of *Indian Corn*, raised at Hoboken, by Mr. J. Stevens, amounting to 118 bushels, 2 quarts per acre. This crop and another were raised on a wager, were measured accurately, and the result excited much attention, it being one of the first of those large crops of that grain that have now become so common. Mr. Stevens planned his corn in double rows, 5 1/2 feet apart in this manner:

□ □ □ □ □ □ □ □ □ □

The sides of these triangles being 7 inches. The corn was dibbled 3 1/2 inches deep, one kernel in a hole, which was then filled with rotten dung.

One of the earliest as well as ablest memoirs on the *Salt Springs* of the state, is to be found in this volume, from the pen of Dr. B. DeWitt. To us who have so long been conversant with that section of country, his description comes with the freshness of our early impressions, and we almost forget that more than 40 years have passed since we first heard of Salt Point, or the paper before us was written. One of the most remarkable changes in the vicinity of the Onondaga Salines, which has taken place since Dr. DeWitt examined the district, is in the health of the region. The town of Salina now contains a population, of some 12,000; and the number of deaths annually, does not greatly exceed that which existed at the time Dr. D. wrote. The cultivation of the country, the lowering of the lake, and the draining of the swamps and marshes, have conferred a degree of salubrity rarely equaled. One cannot avoid recognizing the advantages of the late geological survey and explorations of the state, when they contrast the knowledge acquired, with the crude speculations as to the source of our brines so current at that time. The quantity of salt made annually, (1797), is estimated at 60,000 bushels. The product of this year, 1843, will not vary far from four millions of bushels.

Simeon DeWitt has given his method of *Preserving*

Butter, so as to avoid the rancidity so common and so disagreeable. A cask of sufficient size is provided, into which brine made from good salt, as strong as possible, a little saltpetre added, and then boiled and skimmed to insure purity, is poured, after the vessel has been previously soaked and washed in another brine. The butter is then made into suitable rolls, as it comes from the dairy or is purchased in the market, and put into the brine. To keep this butter perfectly under the brine, and on this the sweetness is mainly depending, a circular board of nearly the size of the cask is provided, in the center of which a round stick is secured, the upper end of which rises above the cask. Two wire staples are driven into the top of the cask, and a cord passing from one through or over the top of the stick, and secured to the other effectually, keeps the butter below the surface of the brine.

We think this a good method of keeping butter sweet, but the best method we have yet seen tried, is to pack the butter while perfectly sweet, in firkins, headed up close, and then throw them into a vat supplied with spring water of a low temperature, or else into a well of the same kind. Exclusion of air and a low temperature, are thus both secured, and these points gained, butter well worked and sweet, may be kept so for an indefinite period of time.

Nearly 100 pages of the 2d volume are occupied by a series of papers on *Sheep*, by Mr. Livingston. Mr. L. was among the first introducers of the Merino into this country, and we here find one of the earliest descriptions of this sheep, quality of wool, and its probable effect on the improvement of our native sheep by crosses. What was theory in Chancellor L., has become fact in practice, and though his labors were derided and underrated by many, the result has been felt in every part of the U. States. The agriculturists will not be apt to forget the man who was mainly instrumental in bringing gypsum into use, and introducing the Merino into the country, and this distinguished honor can fairly be claimed for Mr. Livingston.

There is a valuable paper on the cultivation of *Hemp*, from the pen of James Geddes, Esq. of Onondaga co., but the expectations which were at one time entertained of the extensive culture of this plant in western New-York, have never been realized. It was found that other crops more easily grown, would be more profitable, and that the opening of the Erie canal, by bringing this district so much nearer a market for such products, soon caused a total suspension of the hemp culture, where it had been attempted.

Soaking Seed Wheat in brine, and then drying it in lime, to prevent smut, was first brought before the farmers of New-York in these volumes, and wherever adopted produced the happiest results. The public spirited farmers on the east of the Cayuga lake, early availed themselves of this preventive, and with such success, that large quantities of Cayuga wheat found its way to other places for seed; and it was for years, and perhaps still is, believed by many, that the practice of brining and liming originated in the district named. Strange as it may seem, with all the certainty of exemption from smut this treatment of wheat offers, there are very few farms where the practice of liming is so carried out as to effectually exclude smut from the fields. Greater attention to this point would be for the benefit of all parties concerned.

One of the most destructive insects to the grain grower in the southern and middle states, and occasionally farther north, is the true *Weevil*, which attacks the wheat in the sheaf or the bin. Mr. L'Honniedieu states that this insect may be driven from granaries, mills, &c., by sprinkling over the wheat fine unsalted lime, five or six handfuls to every five bushels, as it is shoveled into the bins. When wanted for use, the fanning mill will blow off the lime, as well as the dust made by the weevil from the wheat. Wheat we understand is now successfully preserved in the south, by heating a hoghead turned bottom upwards over a coal fire, as hot as it can be made, and while hot, filling it with wheat and heading it carefully up. This destroys what weevils there may be in the grain, and effectually excludes others from entering.

The papers of the 3d volume are on the whole of a less practical cast than those of the former volumes, though on subjects of interest to all farmers it contains some articles of great value. Among these is a paper on the qualities and manufacture of *Flour*, from the pen of that experienced dealer, J. Humbert, of New-York. Many of the complaints he states as existing against N. York flour, are now done away, the flour of western New-York being unrivaled in all the qualities that constitute a first rate article; but there is a vast deal of wheat ground for families and for market, where the product is seriously damaged, and the life of the flour killed by bad grinding. If in grinding wheat or corn, the stones get heated to such a degree as to raise the temperature of the flour to any considerable extent, the flour is surely hurt. It may be cooled immediately, and farther damage checked, but the mischief done is not remedied. Too fine or close grinding is also injurious to the quality of flour, and this is particularly the case where millers pass the shorts or a large part of the product a second time through the stones. The effect of close grinding will be seen more readily on corn than wheat, in spoiling, or rendering such corn meal unfit for bread. The best corn cakes or bread, is always made from meal ground only moderately fine. Too close grinding destroys its value for cooking in the estimation of all who are best acquainted with this grain. We are glad that public attention has been called to this subject, as the

proper grinding of wheat and corn, is a question of vast importance to the community.

There are papers from E. C. Genet, on several subjects, in one of which he describes the benefit he derived from feeding some valuable, but diseased and weak *Merino Sheep* with milk. Their restoration was complete, and what was singular, while the rest of his flock suffered severely from the scab, the milk fed sheep were perfectly exempt. In Switzerland, and some parts of France, the best vinegar is made from the whey of milk, by a very simple process. The whey, carefully clarified, is poured into casks, with aromatic herbs and elder blossoms, to give flavor and color as desired, and exposed in open air to the sun, where it soon acquires an uncommon degree of acidity. We think that in the newly settled parts of our western states, where cider for vinegar is not to be had, this method of providing an article so essential to the health and comfort of a family, might be found useful.

The opinions and the facts advanced by Prof. Brownell, on the *unfitness of Great Britain for the growth of Fine Wool*, have been fully established by long experience, and by the universal failure of every attempt that has been made to produce pure Merino or Saxon wool in that kingdom. Experience, too, has demonstrated that in no part of the world can better or finer wool be grown than in the U. States; and every year is adding proofs to our vast resources in that respect, particularly in the adaptation of the western states to its production.

The 4th volume is divided into two parts, and both are filled with papers of great practical value to the farmer. One of these is a description of the manner of cultivating the *Peach* at the south, by James Geddes. He thus notices the method there adopted to avoid the attacks of the peach borer, and which would doubtless be as effective here as there. "To prevent these insects from operating on the softened bark near the surface, a hill of earth about a foot high, is raised around each tree about the first of June, and taken away about the first of September. The insects either find the bark too hard and dry to pierce, or the taking away the earth leaves the eggs uncovered and they perish; the fact is, that after ten years trial, Mr. Bayly has found his trees thus completely preserved against the worms."

Mr. Durkee mentions that he has twice killed patches of the *Canada Thistle*, by covering them with straw to the depth of four or five inches. This was done in the spring when they were about six inches high, and care was taken that the straw was not disturbed. We have often destroyed small patches of them in this way, using wheat, pea, or other straw for smothering them, but we have always used it more liberally than is recommended by Mr. Durkee. Where the thistle has but just taken root, perhaps this is as good a method of exterminating them as can be tried; but repeated cuttings, so long as they continued to vegetate, has been the most certain remedy with us.

Inquiries are frequently made as to the best method of germinating the seeds or haws of the *Thorn*; the following, condensed from a paper by Mr. Tibbits, will we think be satisfactory. Collect the thorn berries when ripe, and lay them in a pile mixed with a small quantity of rich warm loam, in a place in the garden somewhat shaded by a fence or tree. In the next summer, turn the mass with a shovel, that the whole may be equally exposed to air and frost. In the second spring, when they have been exposed to the frosts of two winters, and the air of one summer, and as early as a bed can be made for their reception, spread the seeds with the mixed loam over a bed of rich, warm, clean earth, when the good seeds will soon sprout and grow. Some of the plants will grow two feet, and may be set in hedges the next spring, while the smaller ones may stand till the next year before they are transplanted.

The following directions for *Preserving Fruit*, given in this volume, are from the pen of Mr. Knight, the celebrated British horticulturist: "The most successful method of preserving pears and apples, which I have hitherto tried, has been placing them in glazed earthen pots, each containing about a gallon, and surrounding each fruit with paper; but it is probable the chaff of oats, if free from moisture or any offensive smell, might be used with advantage instead of paper, and at less expense or trouble. These vessels being perfect cylinders, about a foot each in height, stand very conveniently on each other, and thus present the means of preserving much fruit in a small room; and if the spaces between the top of one vessel and the base of another, be filled with a cement composed of two parts of the curd of skimmed milk, and one of lime, by which the air will be excluded, the later kinds of apples and pears will be preserved with little change in their appearance, from October till March. Dry cool situations, are the best for the preservation of fruit."

We have thus made a hasty sketch of some of the papers in these volumes that record the labors of the first State Ag. Society of New-York. The effect of these labors we feel at the present day, in the impulse they gave to agriculture, and the spirit of inquiry and investigation they produced. The leading spirits of this association were men of powerful minds, far-reaching in their views, and in their practice evidently in advance of their age. It is gratifying to trace in these volumes the germ of some of the great improvements of the times; to behold suggestions and inquiries expanding into practice and facts; to see where we in our husbandry have improved on the old, or introduced new methods in culture; and in particular to observe the vast advance there has been made, since these volumes were published, in most of our agricultural implements.

New-York State Agricultural Society.

DR. BEEKMAN'S ADDRESS AT ROCHESTER.

FELLOW CITIZENS—The place that I now occupy, and the address to be made, I did hope would have been confided to some other and abler man. Individuals have been named for it whose reputation for talent and eloquence would have done more justice to the cause and better suited the occasion. But, as we could not control their action and this duty was to be discharged, it has fallen to my lot to address you. This notice on my part at this starting point is the more necessary, as on the two preceding anniversaries of this Society, we had the pleasure on one occasion to listen to that veteran of eloquence, the president of Union College, and on the other to the pertinent and glowing delineations of our then Governor.

The yearly exhibition of American skill in the products of the farm and the workshop, is completed. What remains to be done is for us to commune together a few moments on the great theme on which it is our delight to dwell, and then to bestow the civic prizes that have been so nobly and honorably won. I trust, however, we shall not soon lose the impressions created by the satisfactory display we have just witnessed: those impressions are to be taken home to occupy our evening thoughts, and to be hereafter a subject of fruitful remark and amicable discussion. What can be more natural and what more gratifying?

The exhibition is the evidence of our skill. To think and talk about it, will as necessarily follow, as the desire to outstrip, hereafter, all that has gone before us, is inherent in the breast of man. Our object then is accomplished.

You see the position which we now occupy as an agricultural community, and we ask you to lend your aid to the farther advancement of the great cause in which we are engaged. In this assemblage, who is there that would not rejoice in a prize this day, as the testimonial of his industry and skill? Who would not wish to stand before his neighbors and friends, and receive from the judges the civic crown that well directed exertion is sure to win? Is that man present? If so, point him out to me, and I will show you a man not fit to associate with American freemen, nor hold converse with the farmer of my country. He has no business here. If you find him, go to his home and you will soon perceive he has left the footprints of his husbandry behind him, in his broken fences, dilapidated buildings, and all else that constitutes him a bad farmer and a worse neighbor.

But, we will turn from this subject, and take a hasty view of the operations of the Society, since we have had an organization. It has been in existence since 1832. A short time previous to that period, a circular was issued by a few friends of agriculture, and a meeting proposed to be held in the city of Albany, in February of that year. A few individuals met for that purpose, and although the farmers generally did not attend, yet it was gratifying to see that the spirit was there; for we had gentlemen at that meeting from different parts of the state, who had traveled from two hundred to three hundred miles in the depth of winter, and thus gave evidence of their zeal and of the benefits which they expected would result to the farming interest from associated action.

Some of the first men of the state were there, and mixed with others, who had more intelligence than fame.

The Society was formed, and Mr. Le Ray de Chaumont chosen its first President. The public mind had not been sufficiently prepared to give it a hearty and welcome reception. The objects of the Society were not generally known, and few persons offered their names as members. To overcome this difficulty and enlighten the public as to our objects, we came to a determination to establish a paper devoted solely to the advancement of Agriculture. This gave birth to the "Cultivator," a paper started in Albany, in March, 1834, as the organ of the Society and its medium of communication with the public. How far it has sustained the cause for which it was established, most of you, I trust, have been able to judge, as it soon gained a circulation of many thousands. True, it was chiefly edited by a man of uncommon intelligence, and with whom farming was a favorite pursuit, and who has left behind him a name unspotted, and a fame as enduring as the pursuit of Agriculture will be beneficial and lasting.

Yet its effect in increasing the members of the Society did not meet the expectations of its friends, and for many years we struggled through discouragements that would have disheartened less determined men. We knew we deserved success, and were determined to accomplish it. We had confidence in the good sense of our farming community, and that when they fully appreciated our object and efforts, they would give us the encouragement we deserved.

Our first Fair was held in Albany, in 1834. It was an exhibition creditable to us as a first essay, but not such as we had a right to expect from a state as wealthy, intelligent and populous as ours. These fairs were annually continued with varied success, while we were slowly, yet steadily, gaining the confidence of the public. Two years ago, we determined to give more scope to our operations and throw ourselves more fully on the liberality and intelligence of our farming and mechanical community, and appointed a Fair to be held at Syracuse.

How far we were successful, most of you, through our agricultural journals, and the ordinary newspapers, have

been informed. Suffice it to say, it was cheering to the hearts of the friends of the Society to witness, as we did on that occasion, the complete success that crowned our efforts. We saw there congregated the choicest collection of animals, brought from the most distant parts of the state—a large assortment of the varied farm implements, made after the most improved models, and with excellent skill, together with a great variety of articles, the product of the work shops, and evidences of the ability of the manufacturer. To the best of these several specimens, suitable premiums were awarded, and I hope the gratification witnessed on that day, in the thousands there assembled, has not been suffered to lose its influence in awakening this western community to the great benefits that must result from this most laudable competition. What can be more gratifying to the farmer, than an exhibition of the best specimens of all the different animals necessary to him in the profitable cultivation of his farm?—the varied farm implements made with consummate skill—the manufacture of a thousand articles, beautiful in themselves, but more beautiful collectively, and intended for his use or his enjoyment? These are seasons to him full of instruction, for he sees perfection as far as human ingenuity has reached, and profits by the lesson. When at home he looks upon his own as almost perfect, but here he is astonished that his humble efforts fall so far short of what he sees before him, and if he is a man of sense and reflection, he determines to carry home with him a new stock of ideas thus gained, and engraft them upon his own, by adopting the improvements every where manifest. The man who cannot profit by these lessons, is either very stupid or very conceited, and in either case is a bad specimen of the American character.

In the autumn of 1842, the Fair of the State Society was held at Albany. The collection of animals was larger than at Syracuse; so it was of farm implements, of the products of the field, the vineyard and garden; the manufacture of all sorts of carriages, and all that pertains to them, and a vast variety of things called for either as articles of necessity or luxury—all most beautifully made. It was an exhibition as pleasing to the farmer as it was to the American patriot; for he had the evidence before him of the skill of his countrymen, and of his independence of the foreign manufacturer. There, too, we saw collected the intelligent friends of agriculture, mechanics and manufactures, from different parts of the Union—from the east, the south, the remote west, and her Majesty's possessions in Canada. Truly this meeting was an intellectual feast, and it was one of those great occasions that do more to give vitality to the cause and carry it onward, than years of steady plodding labor. I trust the occurrences of the three days spent at that time will not soon be forgotten, and that the gentlemen from other states who honored us with their presence, and encouraged us with their remarks and example, have themselves carried home a conviction, from the display there witnessed, that the sons of the Empire State are alive to her great interests and not wanting in ability to develop them; that they know how to make the best use of her numerous railways, her extended canals, her noble lakes and rivers, to give efficiency to the industry and hardihood of her population, and to increase the fertility of her soil.

The state of New-York, from her size, her position, and her natural advantages, is most happily situated to avail herself of the great benefit these confer; and whether individuals, for the purpose of agriculture, are located in her eastern, middle, or western portions, there is still a greater equality of advantages than one at first sight would suppose. The city of New-York is the great market for all, the Hudson river and the Erie canal the viaducts that lead to it. The Hudson river farmers boast of their easy and quick communication with it—the western farmers, of the superior fertility of their soil. Both are true; and the scale of benefits is thus beautifully balanced. The coarse grains of the east do not come in competition with the wheat of the west, and the profits of each are probably equalized. The Maker of the Universe, with a wisdom that we but faintly comprehend, deals out his bounties to his creatures with an equal and liberal hand. He gave us understanding, and made the earth for the use of man; but while He requires him to earn his bread in the sweat of his brow, man is so happily constituted that the labor of his hands can be most essentially aided by the exercise of his reasoning powers.

These have taught us to dig canals, make railways, excavate mountains for their treasures, cover the hills with grain and with herds, fill the valleys with herbage, and use the ocean to carry our several products to supply the wants of the most distant countries. The time has been when none but serfs and slaves labored; that time, for man's prosperity, has happily in a measure gone by.

In many portions of Europe, to labor is dishonorable. In this country, to labor is honorable, for here an idle man is a nuisance. An author asks, "What honest vocation can be named that does not contribute, in a greater or less degree, to the enjoyment of man? It may be humble indeed, but it goes to swell the mighty aggregate. It may be the rill that trickles down the mountain side, but it diffuses fertility to the valley, and mingles its drops at last with the ocean. The American motto is industry. Labor is honorable—idleness is dishonorable; and I care not whether it is the labor of the head or of the hands, for they mutually aid each other. Let me, however, exhort those who are devoted to intellectual pursuits, to cherish on their part an exalted and just conception of the dignity and value of manual labor, and to make that opinion known in their works, and seen in their actions.

"The laboring men of this country are vast in number and respectable in character. We owe to them, under Providence, the most glad some spectacle the sun beholds in its course, a land of cultivated and fertile fields, an ocean white with canvass. We owe to them the annual spectacle of golden harvests, which carry plenty and happiness alike to the palace and the cottage. We owe to them the fortresses that guard our coasts, the ships that have borne our flag to every clime, and carried the thunders of our cannon triumphant over the waters of the deep."

Enterprise is another great trait in the American character. United with industry, it stops not at difficulties—it delights to overcome them. If occasionally its efforts are misdirected, in the main it is a healthy exercise of a wise forecast, aided by good sense, to advance individual and common interests. That enterprise has opened our forests, built our cities, manned our ships, projected our canals and railways; and whether we circumnavigate the earth, or people the Oregon, the cry of "go ahead" is still the watchword to urge us forward. In passing from this place to Buffalo on your railway, a few months since, I was forcibly struck with a practical and beautiful illustration of this trait in our character.

In Europe, it takes centuries to build cities, and they suffer all the evils arising from their slow method of transit for the interchange of products, before they dare venture upon a more rapid communication. But in this country, the foundation for cities is hardly laid before railways are made in every direction to secure to it population, business and wealth. Between Rochester and Buffalo, the red man of the forest has yet hardly left his hunting ground, and the deer been frightened from her covert; yet the forest is already thinned, and a pathway made, on which you pass with the rapidity of the eagle's flight, and by a power that seems irresistible. As you dash through the dark woods, your sensations are in unison with the scene around you, and an indescribable wildness is the predominating feeling.

These forests cover yet a large portion of our state. The country is too new and the population too sparse—although it may number at this time near two and a half millions—to bring a large portion of our state under cultivation.

The state of New-York is about the size of England. They have about ninety-eight millions of acres under cultivation—we, say ten. They produce annually two hundred and sixty-two millions of bushels of grain—we, about fifty-one millions. They have ten millions of cattle, and forty-four millions of sheep—we, two millions of cattle, and five and a half millions of sheep. The comparison of many other farm products holds about the same proportion.

In the cultivation of the soil, however, acre for acre, we are much nearer to them in the quantity of the general products; and when an equal area of surface is cleared, and we have about quadrupled our population, I trust we shall not be behind them in obtaining equivalent returns. Forty years ago, farming in the river counties was of the worst possible description. The virgin fertility of the soil had been exhausted by repeated croppings, and when we heard of the immense quantity of wheat raised in what was then called Genesee, it was thought, when compared with our section, that it was a very paradise for farmers.

Many of course were tempted to emigrate; and why not? The fertility of their farms was exhausted, and they did not know how to restore it. Their course of cropping was nearly as follows: take off the timber, put in wheat; then a crop of corn; after that, sow it with rye as long as it would grow. This was the course on the sandy ground; on the clay, a stronger soil, they put in wheat as long as it would grow; after that, let it run to pasture. To sow grass seed was not thought of. Cultivation like this brought at length poor returns to the farmer.

A renovating system for the soil must be adopted, from which better returns could be obtained, or they must all emigrate. The use of clover and plaster was the first renovating power that was tried, and they repaid tenfold the expense of their application.

But that was far from being enough; other appliances must be added, and they at length found that the dung heap, if they could only make enough of it, would effectually fill up the hiatus. Now, it is not alone the litter of our barn yards that is used for that purpose, but every species of offal and refuse, from the mud of the ditch to the muck of the swamp—from ashes, marl and lime—all! all! and all else that can be obtained, down to old rags, are found to have the most invigorating influence on the soil. Chemistry, too, is now coming to our aid, and she promises to be a most powerful ally. But we yet want to learn, as nearly as possible, how cause produces effect; we need a more intimate knowledge of our soil and its capacities, and what kind of substances and methods of husbandry will give the largest returns.

Our art is yet in its infancy, and our implements, until lately, have been of a piece with our husbandry.

These, too, have essentially improved, but it is only since the whole system has been examined, and found, throughout, deficient. A better day, however, is dawning. Many of these poor lands have been in a measure reclaimed, and the prospect for the future is brightening.

Agriculture, for fifteen or twenty years, has occupied a prominent place in our pursuits, and it has already made such full returns for the little attention bestowed upon it, that its advancement has become not only a

matter of interest, but the study of it a source of pleasure.

Our men of talents have lately turned their attention to the subject. Our men of property have devoted a part of their wealth to its improvement; our farmers have brought their intelligent minds, as well as willing hands, to aid in the general advancement. And last, though not least, the statesmen who have this day met with us, we know to be its most devoted friends.

The state, too, has contributed her aid, by the general diffusion of knowledge, in the establishment of her schools, and in pursuing a much more intelligent as well as expansive system of education. She has aided by her geological survey; by her beneficence in contributing to the formation of country agricultural societies, and the patronage she has bestowed in the formation of this, the Agricultural Society of the State of New-York.

Our agricultural journals, too, of which there are many and excellent ones, have immensely multiplied; they have awakened public attention, for, from their large subscription lists, we must infer that they have many willing readers. These are the dawnings—they indicate that our progress in happiness is onward; that we are the friends of civilization, of education, of all that is to make us a great and prosperous people.

To you, American farmers, who comprise so large a portion of our population, a high destiny is committed. It is not enough that our fathers formed a government which secures equal rights to the humblest, and is the rainbow of hope to the oppressed of all nations. It is for you to carry on the work, not alone of political, but intellectual and moral improvement. A vast field opens before you, and I rejoice that here, where intellect is so bright, and humanity has so many friends, these great ends are in progress to their accomplishment.

We have met, fellow citizens, at this place, to commemorate the Fair of this Society for the year 1843. Our object was to exhibit to your view, and I trust to your benefit, the finest animals we could collect, the best farm implements that inducements in the way of rewards would bring together; and not confining our attention to animals and implements, we have offered premiums for almost every variety of articles that either your wants, your tastes or your desire for luxury would call for.

If, from this display, you return to your respective homes benefitted by our exertions and anxious hereafter to contribute your part to the general improvement, our labor will have been well bestowed; for this great state will be advanced in its onward march by the streams of wealth you will pour into her bosom.

NOTICES OF NEW PUBLICATIONS.

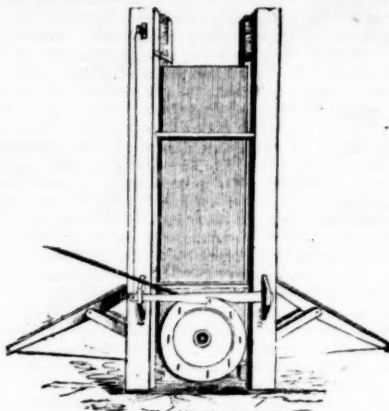
PROF. SILLIMAN'S JOURNAL.—The October No. of Prof. Silliman's Journal is before us, containing many valuable papers of interest to the general reader. Among these, are the notice of Dr. DeKay's Report on the Fishes of New-York; remarks on Tides and Currents of the Air, by Mr. Redfield; the Fossil Trees of Nova Scotia; on Vibrating Dams; and the paper on the Fossil foot prints of Birds, and the impressions of Rain drops in the Sandstone of the Connecticut. Every person who has a taste for the sciences, should be a subscriber to this Journal.

NORTH AMERICAN REVIEW.—We have received from the publishers, the October no. of the North American Review. Its articles are written with great ability, and two of them are on subjects of great interest. We allude to those on the Commercial History and Policy of this Country, and the Independence of the Judiciary. The Despatches of Cortes, the conqueror of Mexico, will be read with interest. This long established journal well sustains its high reputation, and in its series forms the best History of American Literature existing.

AMERICAN BIBLICAL REPOSITORY.—We invite the attention of those who are interested in such discussions, to a paper on "English Phonology," in the October no. of this capital Quarterly. It is not often that we meet so intelligent and searching a dissection of the structure of our language as is there to be found. Of the purely theological department of the Repository, we shall only say that it contains many papers profoundly and beautifully written. In matters of Biblical criticism, the Repository is without a rival in this country.

ECLECTIC AND MUSEUM.—Prof. Agnew deserves great credit for the skill with which he monthly serves up the very best papers in the whole range of Foreign Literature to the subscribers to the Eclectic and Museum. The admirers of that "half reasoning" animal, the dog, will find in the Oct. no. a paper after their own heart; containing more curious facts relative to this animal and his services, than we have ever elsewhere seen collected. The paper by Macauley, on the Life and Writings of Addison, like all his similar essays, possesses the highest merit. Of all our reprints, we prefer the Eclectic.

"VALUABLE COWS."—In our June no. "A Connecticut Boy" questioned a statement of the product of two cows, published in the Conn. Farmer's Gazette. The statement was as follows:—"Mr. S. Baldwin of Washington, Ct., made between March 4, and December 8, 1843, from two cows, besides supporting a family of two persons, 439 lbs. butter and 1,254 lbs. cheese." The Gazette publishes a certificate verifying this statement, which states that the facts can be substantiated by oath if necessary. The product it will be seen, is 846½ lbs. per cow—over one-third of which was butter. If any of our friends can equal this, we should like to chronicle the fact.



DEDRICK'S HAY PRESS.—(Fig. 92.)

ABOVE we give a figure of a hay press, patented in June last, by Mr. L. DEDRICK of Kinderhook, which he describes as follows:

"The power consists of two toggle joints placed opposite each other, drawn up by chains, from the lower end of each, winding on a windlass. From the wheel of the windlass a rope is drawn by a capstan, at which the horse works. A weight is added by a crooked lever, which assists in starting, so that the follower will move 12 inches farther than any other Toggel joint Press, and with greater ease.

"The joints are of such a nature that their power increases sufficient to meet the harder pressure of the hay, and thus making the draft of the horse at all times equal. The joints drawing against each other, there is but very little friction on the windlass. The horse makes 8, 10, or 12 turns, as may be desired, in pressing a bale. The follower lowers of its own accord, and is regulated by a lever in the reach of the person treading the hay, so that he can lower as fast as he desires.

"It occupies but a small space—10 feet square is sufficient in any barn, as the power works beneath the floor, and the horse will operate higher, or off in any direction from the press. Cost, from \$100 to \$120."

THE FARMER'S COAT OF ARMS.

ONE of the most attractive and prominent objects at the exhibition of the Rensselaer County Ag. Society, held at Lansingburgh on the 3d and 4th of October, was "The Farmer's Coat of Arms," planned and executed by ALEXANDER WALSH, Esq., well known for his long continued efforts in behalf of every measure calculated to advance the interests or elevate the standing of our farmers.

The structure was pyramidal in its form, 23 feet in length and 17 in height. Some idea of its massiveness will be obtained, when it is stated to have comprised no less than 58 agricultural implements, some of them large and ponderous, all valuable and useful to the farmer. Among them were a horse power and threshing machine, a fanning mill, horse rake, Yankee churn, hay knife, bush hook, bill hook, root cutter, corn sheller, cultivator, grain cradle, plow, straw cutter, &c. &c. Indeed, there was scarcely any instrument wielded by the hand of the farmer or used by him, from the common spade and hoe and axe to the most complicated and finished of agricultural machines, which found not a fitting place in the structure; while the natural roughness of the implements was softened down and rendered agreeable to the eye by a felicitous arrangement and combination of fruits and flowers. The whole was symmetrically adjusted, forming a pile every part of which was fraught with significance, and whose *tout ensemble* fully harmonized with all the rules of taste. The pyramid was surmounted by a diminutive but highly finished plow, on which perched an American eagle, ready, as it seemed, from the auspicious and buoyant impulses of agriculture, to spread his wings for a loftier flight. In the centre were a barometer and chemical apparatus, such as retorts, crucibles, blow pipes, &c., near which were the following appropriate printed mottoes: "Every change of wind, every fall of rain must affect some of the manifold operations of the farmer;" "There is no pursuit in which so many of the laws of nature must be consulted and understood as in the cultivation of the earth." On the right side was another—"Agricultural implements to save labor, facilitate industry, economize time, and increase production." On the left another—"Cultivate man—the improvement of the animal and vegetable kingdoms will surely follow." In the rear another—"At this period of the year, it is peculiarly proper for us to indulge in these Shows and Fairs—the horn of plenty ever flows with its abundance—the gardens and fields pour forth their abundant stores." Illustrative of these latter sentiments, around the base as well as upon the superstructure, were arranged a rich variety of fruits and vegetables—"overflowings of plenty's abundant horn"—made to overflow by the blessings of Divine Providence upon the husbandman's toil. Among the rare fruits, &c. that adorned the pile, were the following:—Five varieties of Siberian crab apple, plums, strawberries, the Pyrus Japonica apple, the seedless Barbary, sea kale, Chincupin chesnut, green globe

artichoke, celery, carrots, second crop Windsor beans, cauliflower, new variety beet, Bassano tomatoes, &c. &c. Of named dahlias, it was ornamented by the following: Charles XII., Penelope, Zeno, Ansals Unick, Maid of Bath, Mania, Windal's Queen, Beauty of England, Reliance, Countess of Mansfield, Bowling Green Rival, Rienzi, Beauty of Bedford, Mrs. Rushton, Contender, Russell's Unique, Lord Morpeth, Wellers Mary, Lady Mallet, &c.

While the philosophical and chemical apparatus pointed to the connection between the natural sciences and the pursuits of agriculture, and reminded the beholder of the claims of those sciences to the increased attention of the farmer, the value of facts and practical principles found in the agricultural publications of the day was also set before the eye on the right side of the structure, where *The Cultivator*, the Reports of the N. Y. State Agricultural Society, and such books as the Farmer's Companion, Dana's Muck Manual, the Orchardist, and the Complete Farmer occupied a conspicuous place. Above these, and on the right side, were cocoons, mulberry leaves and reeled silk of 1827—the inventor of the structure thus referring to his early attention to the silk culture, that now begins to engage the farmer's attention. In view of the retirement and repose of rural scenes, and the well known fact that certain animals which, being out of their sphere in cities and villages, there seem timid or untamed, but are quite domesticated in the vicinity of the farmer, he also placed a rabbit in the bottom of the horse power, as if to represent the tranquil scenes and enjoyments of the farmer's life. Grapes were not forgotten; grouped bunches and wreaths of these spread their decorations over a large part of the structure. By way of protection to the whole, a suitable awning was erected, extending over it and ornamented with graceful festoons. This display of ingenuity and taste, so strikingly emblematical of the occupations of the farmer and of sciences identified with his appropriate elevation in society, and with the richest fruits of his labor, could have been inscribed to none more fitting than the individual selected. A descendant of one whose name is associated with whatever belongs to sterling excellence of character, and in whom agriculture and its kindred sciences found a most munificent patron—himself also the enlightened and honored president of the Society whose annual Fair this Farmer's Coat of Arms was intended to grace, it was gratifying to read, in a miniature engraving of the fabric, appended near the centre, the following dedication:

"To WILLIAM P. VAN RENSSELAER, Esq., the Enlightened Agriculturist, the efficient and honored friend and patron of Natural Science, Temperance, Religion, and whatever belongs to the welfare of our Agricultural Population, this FARMER'S COAT OF ARMS, composed of machines and implements for increasing the fertility of the soil and the productiveness of human labor, is most respectfully dedicated, by his obedient servant, ALEXANDER WALSH."

It was the intention of Mr. Walsh to have exhibited this "coat of arms" at the State Fair, as we learn by the following letter to the President:

Lansingburgh, Sept. 18, 1843.
DEAR SIR—In consequence of many urgent calls for my presence here, I have been compelled to absent myself from the Annual Fair of the State Agricultural Society. You may rest assured, however, that the progressive annual growth of the hitherto unowned child of my brain—the State Agricultural Society—now almost in its twelfth year, and brought into existence by an anonymous advertisement inserted by me in the Albany Argus of 1832, has afforded me the utmost gratification; and my word for it, no parental exertion shall be wanting on my part to aid in bringing it to full maturity.

While going around with you at Rochester, in July last, to select the ground for the Fair, I planned several schemes to indicate in as appropriate and tasteful a manner as I could, the end and object of the meeting. I promised myself much gratification in lending my aid in carrying out these plans; but as I am debarrated that pleasure, I contemplate using one of them at Rensselaer Co. Agricultural Fair, namely, *The Farmer's Coat of Arms*, a pyramid composed of the implements used in agriculture, &c.

Yours, respectfully,
ALEXANDER WALSH.

GREEN MANURES.

MESSRS. EDITORS—I have sometimes thought, (though I have never tried it,) that ground might be cheaply manured, by sowing with oats, barley, wheat, &c. 10 or 12 lbs. of clover seed to the acre, and plowing it under the next spring as a preparative for grain or corn crops. It seems to me that it would help, at any rate, and be cheaper than stable manures. Could you give us any information on the subject?
Burlington, Vt.
H. T. C.

The course proposed by our correspondent, is a common one with many farmers in the wheat districts of New-York, with the exception in most cases, that the clover is not plowed until the second season. It is thought better to let it stand longer than one season, on account of the great gain of the roots, and the vigor of the plant. There can be no doubt that on soils suitable to clover, this method of manuring is much cheaper than any other. We know an extensive farmer, and a most successful one, who avers that he can manure his farm cheaper with clover, than he could with manure, could he have it for only the carting from his yard and spreading.

THRESHING MACHINE—POND MUD—CORN SHELLERS—WEEVIL IN WHEAT.

A correspondent at Montpelier Springs, (Ga.) makes some inquiries in regard to the topics we have named. And first, threshing machines with separators attached. Pitt's separator is the best we have seen used, and think it might be adapted to any good machine. There are many good machines, but perhaps as many poor ones. A good machine will not break the kernel, or leave white caps, of which the writer complains. For kinds, and prices, we must refer to the advertisements in the Cultivator. One remark, however, we must make. All the machines which we have seen, or used on our farm, are too liable to break and get out of order. The castings are too light for the power used. This, where the means of repair are at hand, though vexatious, is not so serious an evil, as when a machine fails at the distance of perhaps hundreds of miles from the means of remedying a failure. As to the amount of wheat a machine will thresh in a day, nearly all is depending on the condition of the grain itself, whether cut with a sickle or cradle, well cured or otherwise. Two hundred bushels may be considered a fair day's work for a four horse machine.

Pond mud may be drawn and spread upon land whenever most convenient; but the better way is to draw and spread in the fall. Where considerable stock is kept, and stable manures abundant, mixing the pond mud with that, in heaps, or covering the cattle yards with the mud, makes the best of compost, and adds materially to the value of the whole.

There are several good corn shellers, of which Whitford's is perhaps as good as any. These machines, in general, are liable to the same objection made to threshing machines; they are not substantial enough, and the same may be said of chaff cutters. Farmers require things strong, rather than handsome; where strength and beauty are united in an implement, all that can be reasonably asked in those respects, is gained.

As to that injurious insect, the weevil, a number of experiments have been made by order of the French government in relation to the preservation of wheat from this insect. Reservoirs, made in limestone rock, or dug and lined with strong mortar well dried, and then filled with wheat, were found to preserve the wheat sound for years, when hermetically closed. If containing the insect when enclosed, they ceased to multiply, and soon became dead or torpid. Dr. Harris says—"These insects are effectually destroyed by kiln drying the wheat; and grain, that is kept cool, well ventilated, and is frequently moved, is said to be exempt from attack."

MR. COLMAN'S CIRCULAR.

In the Sept. no. of the London Farmer's Magazine, we find a circular addressed to the farmers of Great Britain, intended to call out statements relating to animals, culture, plants, climate, &c. &c. The queries are happily constructed, and we doubt not will be responded to frankly and fully, in a great number of instances. If so, a mass of information of the most valuable kind will be collected, of which we may expect the substance in the reports he is to make of his tour, and which can scarcely fail to be of great interest. We give a paragraph of the remarks of the editor of the Magazine, in introducing the circular to his readers, as exhibiting the singular want of information prevailing among well informed men in that country respecting this:

"We are, unfortunately, (and it is a disgrace to us as a nation,) lamentably deficient in statistical information on agriculture. The United States, every year, when the census is taken, institutes the most searching inquiry into the number of live stock, relative produce of the soil, extent of land under cultivation in different crops, &c. Beside these media, agricultural commissioners are appointed for each of the states, to report specially to the government upon the condition and progress of agriculture, and of these commissioners, Mr. Colman was one of the most indefatigable." The reader will see it would scarcely have been possible to have crowded more errors into a single paragraph. There has been as yet but one agricultural census taken; the census is taken only once in ten years, instead of every year; the government does not appoint state agricultural commissioners; not more than three or four out of the twenty-six states have appointed such commissioners; and the result of the agricultural census shows the inquiry was any thing but searching. Of Mr. Colman's labors in Massachusetts, too much can scarcely be said in their praise, and we trust those of Prof. Emmons in this state will be equally successful.

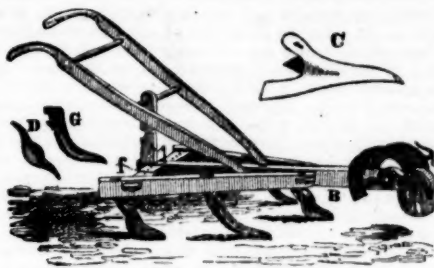
BLACKBERRY BRIERS.

MESSRS. EDITORS—I have about two acres of land overrun with blackberry briars, and cannot get rid of them. I would esteem it a great favor, if you would inform me through your Cultivator how I can get rid of them, without referring me to a late number of the Cultivator, as I have no spare funds left.

Long Island, Aug. 3, 1843.

A SUBSCRIBER.

If "A Subscriber" will turn a flock of sheep upon his blackberry acres, we think he will find them speedily to disappear. If very large and thick, they may be mowed or cut down, and the sheep will take care they do not rise again. Sheep farms are rarely troubled with the blackberry or raspberry. If cut so as not to fruit, the bushes in a few years will perish of themselves, or they may be dug out and the land cultivated.



BEMENT'S CULTIVATOR.—(Fig. 93.)

A correspondent at Pickensville, Ala., requests us to give an engraving of the implement called a cultivator at the north, as many of the subscribers to the Cultivator in that section of the country have never seen one, and opinions are very discordant as to its nature and use. We comply with this request willingly, by giving a cut of one called Bement's Cultivator or Horse Hoe, which, with perhaps some modifications, is found to possess valuable qualities, and is in extensive use. There are many others in use, but the general principle of all is the same; an implement drawn by a horse, constructed so as to spread according to the width of the rows, and by stirring the earth to the depth desired, between the rows of any cultivated crop, such as corn, roots, cotton, &c., exterminate all weeds, keep the earth loose and friable, and save a great amount of labor. The shares may be made of cast or wrought iron, and adapted in form to several kinds of culture. We have known it used successfully for plowing in wheat, as well as in the cultivation of root and corn crops, and it is one of those implements, which when once used, the farmer is rarely willing to do without.

AGRICULTURAL FAIRS FOR 1843.

Few things are more cheering to the real friends of agriculture than the reports which are thronging in upon us from the different parts of our wide country, telling of the success which has attended the numerous Cattle Shows and Fairs that have been held the present season. The spirit they exhibit, the enthusiasm in the great cause of agriculture and domestic industry they prove, must be considered among the most favorable indications that the cause is progressive, and the course of the friends of improvement still onward. The county societies of the state generally, and particularly the State Agricultural Society, have made evident advances in the public favor, and consequently in their wide spread usefulness. With scarce an exception, the meetings of the present year have been better attended, the competition more spirited, the animals and products exhibited of a superior class, and, what should not be overlooked in the matter, the ranks of the grumblers and fault finders have materially decreased. The good results have been too evident to be disputed, and public opinion is fast coming to the conclusion that such exhibitions are essential to agricultural improvement, and deserve the aid and support of every good citizen. In some few instances, unfavorable weather may have occasioned a falling off in the attendance, but could not damp the feelings of those present, or lessen the interest taken in the exhibition. Good animals, it is shown, exert a double benefit; they afford a better profit to their owner, and they create a spirit of emulation in others. Nothing is so convincing to a farmer as actual comparison; with him, seeing is believing, and these agricultural exhibitions are precisely the places where cattle, implements and products are submitted to these processes.

We should be pleased to allot a large space in the present no. of the Cultivator to the details of these meetings that have reached us, but space forbids. The many interesting incidents, the addresses, the interchange of friendly feelings, would furnish matter for interest as well as for speculation. They would show that the right spirit is at work, and that the American farmer has only to follow up the career of improvement on which he has just entered, to insure personal competence and a deservedly high standing in the community.

Not only has New-York shown the importance of agricultural Fairs and Shows, but from all the states evidence is reaching us that the farmer is awaking, and that the example set for years by some of the more favored sections of our country, has not been lost. The Cattle Shows of New-England, in their excellent management, their liberal support, and the confidence with which they are received, scarcely leave any thing in those respects to be desired, and their influence is what might well be expected. Every where agriculture is going ahead; sounder views of its importance, and the best measures for its support, are clearly gaining ground; public men are beginning to trace its vast influence in all the departments of political economy; and it is yearly becoming more evident that all other subjects are of minor consequence in questions of general interest, compared with agriculture. The PRODUCER is fast rising to his proper place, and labor is no longer dishonorable, except with those who are lacking in common sense.

The addresses of the present year have, so far as they have fallen under our notice, been characterized with great ability and practical directness. Some of our most eminent men have cheerfully responded to the

calls made upon them to officiate as speakers at these exhibitions, and have brought to the occasion the zeal, intelligence, science and practical skill for which many of them are distinguished. In others, the practical farmer has left the plow to become the speaker, and showed that he was not one whit behind the best, in the interest he was able to impart, or the zeal he brought to the support of his favorite theme.

Many of the errors of the past in conducting these Fairs have been corrected; experience will do away the remainder; and for the agricultural societies of this country, we may well anticipate a long career of prosperity and usefulness.

GREAT YIELD OF WHEAT.

THE following note from Mr. Dickinson of Onondaga Hollow, will show the course adopted by him in producing his crop of 52½ bushels of wheat per acre, the present season. There can be little doubt that much more labor is expended in producing the wheat crop generally, than would be necessary if the grounds were properly prepared once for all, made clean, and kept clean, so as not to require following as a cleaning process. We have as yet heard of no yield this year that has exceeded this.

W. GAYLORD, Esq.—I send you a hasty account of the preparatory treatment, nature of the soil, &c., in the case of the wheat crop to which allusion has been made. Two years since, this month, I purchased the farm on which I reside, and commenced working it the next spring. There had been no clover seed used on the place by the occupant before me, except on the lot where the wheat was grown by me. That field had a crop of oats taken off, and was then seeded to clover. In the spring when I came on the farm, the clover was small and thin, and I sowed on it, 1½ bushels of plaster per acre. The second week in July, I mowed off the clover for hay. The last of August, I plowed in a large growth of clover, and harrowed it thoroughly. On the 6th and 7th of September, I sowed on one bushel and three pecks of Canada flint wheat to the acre, and harrowed it in. The soil is a friable black slate or loam. The wheat in the whole field was remarkably equal, and the crop per acre as stated.

Yours truly,
Onondaga, Sept. 11, 1843.

O. DICKINSON.

CONVENTION OF BREEDERS.

THE Convention of Breeders heretofore called, met at New-York on the evening of the 17th ult., and was organized by the appointment of Dr. J. A. POOLE of New-Jersey, chairman, and Mr. PARSONS of New-York, secretary. After the reading of the circular calling the Convention, an interesting discussion took place, in which Messrs. WATSON, ALLEN, BEMENT, and others participated, on the various subjects alluded to in the circular. After the appointment of committees to report on the points of excellence in the several breeds of Durhams, Herefords, Ayrshires, Deyons, and native stock, the convention adjourned to meet the following evening at the same place.

On Wednesday evening, a report on the Ayrshires was read by GEO. RANDALL, Esq. of New Bedford, and one on the Herefords by GEO. J. PUMPELLY, Esq. Owego. The committees on Devons and native stock made no report, and that on Short Horns, consisting of Messrs. PRENTICE, BEMENT and ALLEN, stated that from the little time they had been able to devote to the subject, they had found themselves unable to prepare such a report as they would be willing to submit to the convention, and asked farther time to make their report. Though the reports made were not taken up, discussed and disposed of, they elicited a good deal of remark on the general subject of breeding, from most of the members of the convention, among whom were Messrs. Prentice, Sherwood, Vail, Bement, and Pumpelly, of this state; Messrs. Watson, Whitney, and Townsend, of Conn.; Mr. Randall of Mass., and others whose names we do not recollect. A resolution was passed, requesting the committee on Short Horns, to which was added Dr. Poole and Mr. Watson, to report to the annual meeting of the N. Y. State Ag. Society, to be held in this city on the 3d Tuesday of Jan. next, after which the convention adjourned.

NUT GRASS.

Mr. H. F. BOND of Kingston, N. C. inquires whether "any of our correspondents can inform him how to destroy nut grass." As it is unknown to us by that name, will some of our correspondents acquainted with it, and the methods of destroying it, respond to the inquiry?

CURIOUS FACT.—Does not the following, which we find in the Columbia (S. C.) Advocate, strongly support the doctrine of Liebig, that in the absence of other means of nutrition, the nutritive organs act upon, and appropriate the stores already existing in the body; in other words, would the pig have lived so long had he been lean at the time of disappearance?—"Some two months ago, Mr. James Lyles of this place, missed a favorite pig, which, as it was very fat, he supposed had been used by some lover of fat pigs, and gave it up for lost, until last Tuesday, when he commenced the repair of his house, and on raising the floor, which was decaying from dry rot, he found his pig still breathing, after at least 58 days of entire abstinence from food or drink. The pig is still living, and able to take a little meal and water. A number of the most respectable persons can attest the above fact."

Prize Essay.

THE PREPARATION AND USE OF MANURES.

BY WILLIS GAYLORD,
Associate Editor of the Cultivator.
(Concluded from page 159.)

LIME.—There is no substance, containing no animal or vegetable matter, which exercises a more powerful or beneficial effect than lime, in some one or all of its forms of carbonate, phosphate and sulphate. In the common form in which it is found, that of a carbonate, it acts in two ways, mechanically and chemically. Being less porous than sand, and more so than clay, its mixture improves soils in which either of these prevail; while as an alkaline earth, it acts chemically on such animal or vegetable matters as may exist in the soil. Lime develops its chemical action most fully when in its caustic state, or when, by burning, the carbonic acid has been expelled, and the lime rendered what is termed quicklime. In this state, it dissolves such organic matter as may exist in soils, and prepares it for the food of plants. Humus frequently exists in the soil in a solid and insoluble state; lime applied to this, renders it soluble in water, in which form it may be taken up by the roots of plants. A vast deal of needless controversy has been carried on respecting the value of lime as a manure, or the quantity which should be used per acre. By some, it has been extolled as the very highest on the list of effective manures; while others have decried it as of no use whatever; and both have appealed to experiments as establishing their positions. A knowledge of the nature of the action of lime, would have prevented such seeming contradictions. "Lime in excess, forms, from the humus of the soil, an insoluble salt; and may thus, when applied to a soil abounding in salts of lime, or in which it already exists, be productive of injury, whatever may be the vegetable or organic matter of the soil. In this state of excess, lime converts, but at the same time locks up, the humus of the soil; when if applied in the right quantity, it would have been useful. Lime is of no value whatever as a converter, or produces no chemical effect in promoting growth, unless there is organic matter in the soil on which it can act. Lime is most efficient when used on soils full of insoluble humus, such as peaty matter or woody fibre, but which, from the abundance of the tannin principle contained, resist the ordinary processes of decomposition." There would seem to be no difficulty, therefore, in determining whether lime can be used on any given soil to profit. Indeed there are, it is believed, none where it would not be useful, except such as are already supplied with this carbonate, or those which are wholly destitute of vegetable or organic matter. As a general rule, the greater the quantity of humus in a soil, the greater the amount of lime which may be applied with benefit. As long as there is a store of organic matter in the soil, lime, if not in excess, is a valuable manure; but when this is exhausted, the application of lime only increases the sterility by destroying such efforts at vegetation as might in time, aided by light and moisture, partially remove the unproductiveness existing. This fact may serve to explain some of the conflicting statements that have appeared in the agricultural journals of our country, on the use of lime. Where humus is abundant, the quantity that may be safely used, is very great; on soils already poor, a small portion speedily exhausts the remaining powers of the soil. Lime, from its alkaline qualities, acts in neutralizing whatever free acids exist in soils, whether oxalic, phosphoric, malic, or others. It acts also in decomposing some of the earthy or compound salts formed in the soil, and thus renders the geine held by them, available to the plant; but its great and most important use is in converting the insoluble organic matters existing, into soluble ones, and thus directly furnishing an abundant source of nutriment. Carbonate of lime is sometimes used pounded or broken fine; and in this state, its mechanical value is great in stiff or clay soils. Such soils too, usually abound in acids; and these gradually acting on the lime gravel, its chemical effect is slowly but beneficially apparent.

MARL.

Marls, which exert so powerful an influence on many soils, derive most of their value from the lime they contain; and with few exceptions, their power as fertilizers may be measured by the per cent of lime shown on analysis. There are some marls, however, which are an exception to this rule; their value appearing to depend on other matters than mere lime. Of this kind is the celebrated green sand marl of New-Jersey, and some other points of the Atlantic coast. In this formation, which acts so powerfully as manure, there is from 6 to 10 per cent of potash; an agent, which, on light soils, is scarcely equalled as a manure. In addition to the lime which marl contains, the influence of the proportions of sand and clay, of which the balance usually consists, must be taken into consideration in determining the value of this substance for particular soils. Thus, on heavy or clay lands, marls abounding in sand will be found preferable to those the base of which is clay; and on light or sandy soils, the latter will be much the most useful, the per cent of lime in both cases being alike. Marl should be spread over the surface, and pulverized by the action of air and frost before it is plowed under. When so treated, experience proves it is a most valuable manure, and a single dressing exerts an influence for many years.

PHOSPHATE OF LIME.

Of another salt of lime, the phosphate, notice has been taken when treating of bones as a manure. It will not be amiss, however, to state here, that when any substance

is invariably found in any part of a plant or plants, it is right to infer that the perfection of that part of the plant is impossible, unless the substance required is within reach of the plant while growing. Thus the stems of the grasses abound in silex; some of them, the cane for instance, to such a degree as to strike fire with steel, and unless this substance, in the form of silicates, was presented to the plants, they would not be perfect. So it is right to infer that unless soils contain the phosphates, or a supply is furnished for the use of plants, that the cereal grains could never be perfected, as the seeds of these invariably contain large quantities of the phosphates. Phosphates are found more or less in all soils, and when these are deficient, bones form an abundant and accessible source for their supply. It is also found in considerable quantities in all animal and farm yard manures, particularly in the liquid part.

GYPSUM OR PLASTER.

Gypsum is the third principal salt of lime which exerts a powerful influence on plants, and is one of the most valuable of all our mineral fertilizers. Much variety of opinion has been entertained respecting the manner in which it exerts its influence or produces its effects on plants; and these opinions can scarcely be said to be harmonized, even at the present time. Davy was inclined to consider it a direct food for the plant, as it is found, to some extent, in those plants on which it exerts the most power. Chapin referred its power to its stimulating agency on plants, produced by its action when dissolved in water. Liebig ascribes its value to its giving a fixed condition to the nitrogen or ammonia which is brought into the soil, and which is indispensable for the nutrition of plants. Dana, to the action of the lime and acid of which the gypsum is composed on the organic matter and silicates of the soil. He says—"It seems almost incredible that so minute a portion of a mineral can act at all; yet how beautifully is the result explained by the principle that plants decompose first this salt; the lime, for plaster is a sulphate of lime, then acts on geine, which is thus rendered soluble; while the acid, the oil of vitriol or sulphuric acid, immediately acts on silicates." It seems very probable that no single one of these suppositions will be found able to account in full for the action of plaster. That of Dr. Dana appears to approach as nearly to a solution as any of them, if we extend his term silicates so as to embrace those combinations formed by the union of the acid of the gypsum with ammonia, after its separation from the lime. If the action of plaster was due to its fixing ammonia alone, then it ought to be equally efficient at all times and places, which it certainly is not; or if it acted directly as nutriment, then its action would be as constant as that of rotted manure or compost, which farmers well know is not the case. Plaster does not act as usefully in the vicinity of the sea, as in the interior; and on heavy wet soils, is scarcely felt at all. Light sandy soils, or loamy ones, are those on which plaster acts the most sensibly; and clover, lucerne, potatoes, cabbages, and the leguminous plants, such as peas, vetches, &c., are the vegetables on which it exerts the most powerful influence. It is much valued as a dressing for wheat, not so much, perhaps, for its direct action on that plant, although that is not trifling, as for its effect in securing and promoting the growth of the clover and other grass-seeds, usually, in wheat countries, sown with this crop. So marked is the influence it exerts in this respect, that plaster, clover, and wheat, are always associated in the mind of the most successful wheat growers; and its use is the most extensive in the best wheat growing districts of our country. In the minds of many, a senseless prejudice has existed against plaster, on the ground that it the more speedily exhausts the soil, and that the heavy crops at first obtained were the price of ruined farms. It is doubtless true that the man who uses plaster on his farm, who takes from his soils all he can get, and returns nothing to them, will soon find his soils worthless enough. He who intends to farm it in this way, should avoid plaster; but let any farmer alternate wheat and clover; husband and apply his manures; feed off his clover in his fields, or to his stock in their stalls; let him not spare his grass seeds in seedling, or his plaster in dressing, and his farm will never run down. Such men need not fear plaster.

SALT.

Common salt is an active and valuable manure, and has been used successfully as such, in all parts of the world where it can readily be obtained. In England, the pickings or impure salt is used for this purpose; and many experiments are on record to show that the effect is most marked and decisive. The following is one of a series of experiments instituted by Mr. Sinclair, to test the value of salt as a manure. The soil was light and gravelly.

No. 1. Soil without any manure for 4 years.	Produce per acre,.....	13 bushels, 26 lbs.
2. Soil manured with stable dung to the previous crop, (potatoes,)	26 do. 52 do.
3. Soil with 4 bush. of salt per acre, and no other manure for 4 years,.....	26 do. 12 do.

In the opinion of Mr. Sinclair, the effect of salt as a manure was to lessen the produce of straw as compared with other manures, and to increase the weight of the grain.

Prof. Johnston has done more than any other person to extend the use of salt as a manure, by giving to the world his excellent Essay on salt used on soils, and the mass of experiments he has recorded. It appears that salt in small proportions, promotes the decomposition of animal and vegetable substances; that it destroys vermin and kills weeds; that it is a direct constituent of some plants, and therefore necessary to their perfection; that all cultiva-

ted plants of marine origin contain it, asparagus for instance; and that all such succeed better when watered with salt water, than when deprived of it; that salt preserves vegetables from injury by sudden transitions in temperature, salted soils not freezing as readily as those to which salt has not been applied; and that it renders the earth more capable of absorbing the moisture of the atmosphere. When salt is applied as a manure, it may be used in quantities from six to fifteen bushels per acre; although some have gone as high as 50 bushels. Farmers, however, should be cautious how they venture on excessive doses, as an extravagant one could scarcely fail of being fatal to any crop. Legrand, in his experiments with salt, found that it gradually improved the crop of barley until sixteen bushels per acre was reached, when it gradually diminished until the amount of forty bushels per acre was reached, when vegetation was destroyed. Salt combined with manure, has proved very efficient; and in the Woburn experiment, the wheat so treated exceeded all others. The most favorable proportions were found to be 45 tons of dung, and five and a half bushels of salt per acre; the manure plowed in, the salt sown with the seed. The experiments that have been made, would seem to indicate that a preferable mode of using salt, in most cases, would be to sow it on the land some weeks before the seed is to be put in. In this case, where lime exists in the soil, a chemical change takes place, at least partially, and muriate of lime and soda is the result. Such a change would seem to be most favorable to vegetation.

SALT AND LIME.

Salt and lime, artificially mixed as a manure, promises to be a valuable aid to the farmer in those positions where the soil abounds with insoluble silicates or geine, and where other manures necessary to produce decomposition or fermentation are not at hand. Prof. Johnston recommends a mixture of two parts of lime and one part of salt, the mixture to remain incorporated in a shady place, or covered with sods two or three months before using. Salt and lime should not be used immediately after mixing, as bad results are apt to ensue; but after being well mixed in a dry state and lying as directed, it may be applied at the rate of from thirty to sixty bushels per acre, either before or at the time of sowing. Mixed with soot, salt acts with great power on roots. Mr. Sinclair mixed six and a half bushels of soot with the same quantity of salt, and used the mixture on lands sowed to carrots. The result was, that unmanured land gave twenty-three tons of roots per acre, and the manured yielded forty tons per acre; and Mr. Cartwright found that where unmanured soil gave 157 bushels of potatoes per acre, 30 bushels of soot and six of salt, made it produce 240 bushels per acre. Dr. Dana furnishes so beautiful an explanation of the manner in which this manure acts, that it deserves a place entire: "By mixing quicklime with common salt, its soda is left loose, the acid combines with the lime, forming a soluble salt of lime, and so long as the soda remains caustic, it has no effect on the muriate of lime, but as soon as the soda becomes mild or carbonated, decomposition of the muriate of lime is produced, and the common salt regenerated. Commencing then with quicklime and salt, we pass to a soluble salt of lime and caustic soda, and from that to mild soda, and to carbonate of lime and the original salt. If these various changes take place in the midst of peat or geine, it is evident that the caustic soda acts upon the geine, and also evolves ammonia from that substance; secondly, that the muriate of lime, in its finely soluble state, insinuates itself among the particles of the geine; that the soda is also equally diffused, and that when the soda becomes carbonated, it produces an almost impalpable carbonate of lime throughout the whole mass, which, by its equal diffusion through the soil with the geine, acts upon the silicates, as has been heretofore explained." To produce these effects, Dr. D. directs to take one bushel of salt and two bushels of lime; to make the salt into strong brine, and with it slack the lime. Mix both well together, and let them remain ten days; then let them be well mixed with three cords of peat, shovelled well over for about six weeks, when it may be used. A quantity of salt sufficient to destroy all vegetation, may be applied to a soil with safety when a few months are to elapse before the crop is to be put on; as the chemical changes which take place, partially neutralize its effect during this time. A small quantity mixed with the soil in each hill of corn, has been found to protect it from the wire worm and the cut worm; indeed there is no substance that insects of all kinds more dread than salt. It is probable, therefore, that further experiments will show that not the least value of salt is to be found in its preventive properties against these depredators.

CHARCOAL.

Charcoal is a valuable manure, and applied directly to the soil in a pulverized state, produces excellent effects. It acts by rendering the soil more permeable to atmospheric air, by absorbing and retaining for the use of plants the ammonia of the atmosphere, or such as falls in showers; by rendering soils with which it is incorporated warmer; and by furnishing a constant supply of carbonic gas to growing plants. The great productiveness of what are called coal hearths, or those places on which charcoal has been burned, has long been a common remark; but this has been commonly attributed to the ashes, burned earth, &c. on such spots, rather than to the coal. The use of coal alone, however, shows that though these other matters are not without their value, the great additional fertility of these places is mostly owing to the coal. Immense quantities of this substance are wasted in the vicinity of forges, furnaces, smith's shops, &c. which would be of great value, were farm-

ers to collect such refuse or dust coal, and apply them to their farms. On heavy soils in Europe, it has long been customary to pare the surface, and burn the turf so collected, taking care to incorporate as much of the clay soil as will consist with the ignition of the turf. This burnt mass of clay and ashes is scattered over the ground, and is found to make a valuable dressing on such soils.

OTHER MANURES.

It is impossible to particularize all substances that may be used as manure. It is evident, from the definition first given, that they would embrace all animal matters without exception; all excrementitious secretions of animals, and all vegetable ingredients in one form or another, together with a few of the mineral salts, such as the alkalies, silicates, &c. Thus, oil-cake, bran, yeast, brewers' grains, putrid meat, in short any substance that can be classed under the above divisions of matter, may be useful as manures, and this fact should induce great caution in their preservation and application. Whatever may be the present condition of a particle of matter, if it has ever formed a part of an organic body, it can again become such under circumstances favorable to such a condition.

In the preceding rapid sketch of the principal substances valuable as manures, the best methods of preparation and use have also, to a considerable extent, been given. All then that would now seem necessary for the purpose of this Essay, is a condensed view of the principles laid down, with such incidental topics as have been passed over, but of which a notice appears necessary.

PREPARATION AND USE OF STABLE MANURES.

As the common farmer must always rely on stable or farmyard manure, as his principal means of fertilization and renovation of his soils, it is to these, to their preparation and use, that his attention must be principally directed. It is an important question for him to decide, whether he should apply his manure in a long state, that is, apply it fresh from his stables and yards before undergoing decomposition, or let it remain until the litter and straw have fermented and become rotten, before using it. Some remarks on this topic have been made in the preceding pages, when treating of such manures, but its importance will justify their extension in this place. It has been said that rotted manure contains more genuine or humus, weight for weight, than unrotted or fresh manure. This is probable, but to make this test decisive, equal weights of dung should be taken while fresh, one analyzed at the time, and the other when fermented and rotted. This course, it is believed, would show a result in favor of the unrotted. There can be no doubt, however, that straw, stable litter, &c. should be partially fermented before using, and the moisture necessary for the process should, if possible, be the urine of the animals or the drainings of the yards. Straw, in dung intended for a particular crop, is of little use unless the fermentation has far progressed; and a distinguished German farmer has asserted that he considered straw as of no consequence in manure, except as acting the part of a sponge to retain the fluid parts of the animal manures. There are some exceptions to this remark, as when straw is applied to heavy clay grounds before rotting. In this case, when plowed under, it gives a degree of porosity to the soil, absorbs part of the moisture, and acts the part of a valuable amender, while it is eventually converted into a manure, or a source of carbonic gas. Where the unfermented dung of the yard or stable is applied to the soil, it should be covered at once by the plow, that the gases liberated in fermentation may not be lost, and that the moisture necessary for fermentation may be secured. When rotted or fermented, the covering is not of so much consequence, and it may, without loss, be scattered on the surface and mixed with it. If used without fermenting, it should be applied to hoed or summer crops, such as corn or roots, as these are in that state while the manure is at the height of its fermentation, when forcing manures are the most useful; but if applied to the smaller grains, they are most active when matter for the perfection of the seed, not the enlargement of the straw, is most needed, and the last is increased at the expense of the first. Taking all these circumstances into consideration, there can be little question that the most economical way of making and using manures, is to convert the stable and barnyard manure into compost, by the addition of peat, swamp muck, cleansing of ditches, wash of roads, leached ashes, or even common loam or earth, taking care, when the manure is wanted for heavy soils, that the earth used in the compost should be as light or sandy as may be; and where the soil is light, that the compost earth should be marly clay. Into such a compost heap, all weeds, straw, litter, animal matter of all kinds, night soil, &c. &c., may be thrown, and upon it all the wash of the yards and urine of the stables may be poured; and if the animal and vegetable matters as they accumulate, are kept covered and moist, the fermentation will go on successfully; the alkalies and salts of the animal matters will act on the vegetable part and saturate the earths used, and the whole will be converted into manure of the most valuable quality.

PREPARATION AND USE OF COMPOST.

The labor of preparing compost, it is true, is much greater than merely drawing it from the yard, but the quantity is so much increased, and the quality so much improved, that it is the most economical in the end. The only method that can compare with it, is to place these matters over the yard, and let them be composted or fermented in that place; but there will always be a great waste in this way; and where turf or vegetable mold is used for composting with the animal manure, the compost heaps can frequently be made where they are to be

used, and the labor of drawing materials greatly lessened. Bommer's patent manure is only compost made in a scientific and accurate manner, every part of the process so managed as to produce a perfect fermentation, without the loss of any of the valuable parts of the constituents used. From a knowledge of the processes employed by him, we are able to say that where his directions are followed, a powerful and valuable manure cannot fail to be produced. The fundamental principle upon which composts have been made, is that of impregnating the earths used in the process with the soluble salts and the gases, which, in the ordinary methods of rotting, are wholly or partially lost to the farmer. The discussions which have been carried on, as to the propriety or impropriety of burying manures in the soil, have arisen from not stating the kind of manure to be used. The solid and soluble parts of manures have a tendency to sink into the soil; the gases evolved in fermentation have a tendency to rise. The true principle, then, is to bury the unfermented matters no deeper than is necessary to secure the moisture required for fermentation, while the fermented or decomposed dung, having no fertilizing gases to lose, may be mixed at once with the surface earth. Some of the greatest crops of Indian corn ever grown in the United States, have been produced by placing a heavy dressing of unfermented manure on turf land, and turning it under with the plow. The surface is then rolled to press the soil close upon the manure, and afterwards harrowed, to loosen the earth for the reception of the seed. Into each hill, a small portion of fully rotted manure or compost is put at planting. This promotes germination, gives the young plant a vigorous start, and by the time the roots have penetrated beyond this, active fermentation has commenced in the long manure, and thus fertilizing matters are furnished in the greatest abundance when most wanted by the plant.

USE OF LIME.

Of the mineral manures used, lime, as has been already stated, is the most important, and under all its forms, is extensively used in Europe and in this country. The German farmers of Lancaster, Chester, and the adjoining counties of Pennsylvania, use lime more extensively than in any other part of this country. Considerable discussion has been had at different times as to the comparative value of limes that contain magnesia, or such as are free from it; but the value of lime as a dressing for soils, seems to be every where conceded in those districts where it has been used. It appears as the result of experience, that lime produces the best effect on what are called stiff loams, or loams inclining to clay, and in which a good proportion of decayed organic matter is found. It is found, too, that it operates more favorably on soils natural to oak and its kindred trees, such as walnut, poplar, &c. than on those where the beech, elm and maple constitute the principal timber. It is singular that the richest limestone lands, as they are called from being based on this rock, are frequently those on which heavy dressings of lime operate like a charm. If used as a top dressing, lime is usually applied to the soil in the fall; but the practice most approved, is to lime the corn ground in the spring, on the inverted soil. Manure is applied to the wheat crop after lime. The quantity of lime used varies much. There is no doubt it has sometimes been used in excessive quantities; and when used on soils nearly destitute of vegetable matter, can produce no good effect. On a medium soil, fifty bushels per acre may be considered an abundant dressing; but three or four times that quantity is sometimes used. The best method of using lime, is to take it from the kiln, unslacked, and deposit it in heaps in the field where it is to be used, not more than three or four bushels in a place; and either slack it by pouring water over it, or which is better, by covering each pile with earth, and letting them slack by the moisture thus furnished. When sufficiently fine, the earth and the lime are mixed by shovelling over, and the mass is then scattered over the land to be dressed. The soil should be well harrowed after the application of lime, to incorporate it with the surface earth.

NECESSITY OF MANURING.

It is obvious that the manuring of a farm should only be limited by the ability of the owner. On a plentiful supply of manures, is depending the fertility of his soils, the amount of his crops, and consequently the extent to which his labor is rewarded. There is no expenditure on a farm, so safe as that for manure; and the labor required to increase it, is never labor lost; at least, if directed by an ordinary share of agricultural knowledge and skill. Every source of supply should be made available; nothing capable of fertilizing should be lost. The farmer who takes from his soil more than he returns to it, is surely impoverishing it; and if he escapes such a calamity himself, he leaves to his successors a worn out farm. If he returns as much as he receives, his farm will retain its original fertility only; but the true farmer will scarcely be content with this. To increase its fertility, and the amount and quality of the crop taken from the soil, should be the aim of the husbandman. This done, his labor is lessened, his profits are greater, his farm is worth more; nor must the pleasure arising from beautiful fields, golden harvests, fine animals, accumulating prosperity, be omitted in making up our estimate of the advantages of successful culture. Manure may be a homely subject, but on its preparation and use every thing is depending. Without it, the deep green of our pastures, the golden yellow of our corn fields, and the fine beef and white loaf of our tables could not exist. To the farmer, manure must be the first thing, and it must be the last thing; with it, he can do every thing; without it, nothing.

OHIO VINEYARDS.

THE vineyards of Ohio appear this year to be in the "full tide of successful experiment," and though considering the use of wine as a beverage unnecessary, still, as large quantities of it will be used, we are glad to notice the success of the American vinedresser, as supplying an important deficiency in our products hitherto, and one that annually costs us large sums of money to procure. Every step thus gained, we consider a triumph for home industry, and a nearer approach to real practical independence. The German emigrants from the banks of the Rhine have taken the lead in this matter, and their success would seem to be certain. Among the vineyards that are scattered up and down the Ohio, in the vicinity of Cincinnati, that of Mr. J. E. Mottier is one of the most prominent. From a description of a visit to it by the editor of the Cincinnati Gazette, we gather the following facts. The vineyard contains about 6 acres; the vines planted in rows 6 feet apart, and 3 feet apart in the rows. They are trained to posts firmly fixed in the ground, 7½ feet high, and intertwined from hill to hill. Locust posts are preferred by Mr. M. as the most durable. Mr. Mottier cultivates none but American varieties of the grape, and they are of course hardy, and need no protection in winter. He runs a plow or cultivator occasionally between the rows, to keep the soil in good order and the weeds down. He prefers a northern to a southern exposure, as his experience teaches that the grape in that vicinity oftener suffers from early, or spring, than from late frosts. Since 1829, he has lost but one crop from frost: on the Rhine, if three crops out of five are saved, the vinedresser is fortunate. One thousand five hundred gallons of wine were made last year; more vines have this year come into bearing, and the wine product is estimated at 4,000 gallons. The Catawba grape makes a white wine, resembling the Rheishock, and in good repute. The Cape grape makes a red wine, more like Burgundy. The wine sells readily at \$1 per gallon. Mr. Mottier is also largely engaged in the culture of other fruits. His strawberry beds are very productive, and he sold last spring 5,000 quarts. His peach and apple orchards were laden with the finest fruit. Mr. M. is a cultivator of the new school, or in other words, a book farmer, as his fine breeds of cattle, horses, swine, &c. fully prove. His Durham cows are superior milkers, and as he feeds them liberally on carrots through the winter, his butter dairy is very productive, and its proceeds command the highest prices. That the culture of the grape for wine, at the north, will ever become common, we do not imagine; but if our farmers generally would plant out a few vines of the best varieties adapted to their several locations, they would soon find themselves provided with a supply of one of the best of fruits, costing nothing in culture, and rarely requiring renewal.

ELDERS AND DOCK.

"How shall I kill a lot of sweet elders without plowing up the ground? I do not wish to plow, as they are on a rich interval, sometimes overflowed, and the soil if plowed, would be liable to be washed away." (a.)

"How shall I kill dock, which is all over my flats, more or less, (not burdock.) It has a long leaf, grows from one to three feet high, the root runs deep, and the plant produces an immense quantity of seeds." (b.)

(a.) Sweet elder may be destroyed by repeatedly beating down and bruising the foliage and young shoots, as often as they appear during the season. Silk grass, or milkweed, may be exterminated in the same way, but the treatment to be successful, must be thorough. Perhaps as good a way as any, is to take a yoke of cattle and chain, and draw them out by the roots. This is certain; but there must be no roots left, to render it necessary to again repeat the operation. The best way is to meet all such pests at the outset. A single blow with a grubbing hoe, will the first year eradicate an evil, that in course of a few years will require weeks to exterminate.

(b.) Dock is a plant that may be destroyed either by pulling, or by cutting off below the crown of the plant. Small roots may be pulled, large ones must be cut-off. Care must be taken to cut them fully below the crown, and their destruction is certain. It is very difficult to keep overflowed lands free from weeds, as the seeds are liable to be floated upon it, and left in the deposit of mud to vegetate. Annual examination and cleaning, will, however, do much towards giving these rich lands their full value and productiveness.

MACHINES FOR CLEANING CLOVER SEED.

A correspondent in Plainfield, Mass., wishes for some information on the subject of machines for cleaning clover seed, and refers to those mentioned on the 127th and 138th pages of the 7th vol. of the Cultivator, as Ritten house's, and Cummings', and asks to be informed as to the expense, &c. of them. We believe the patentee or maker of the first kind named, resides in Albion, Orleans co., in this state, and if he would furnish us a statement of the cost of his machine, where it can be procured, &c. he might benefit himself and confer a favor on others. We will endeavor to obtain from Mr. Cummings, a description of his machine, cost, &c. Will not some of our Seneca co. friends, who are famous for the quantity and goodness of their clover seed, favor us with an account of the machines used by them for cleaning clover seed, with their cost?

Original Papers from Contributors.

PLOWING GREEN SWARD FOR SPRING CROPS.

At what season of the year should green sward be turned over for a crop of corn or potatoes, with the greatest amount of economy in view to the cultivator.

MESSRS. EDITORS—That all grass lands intended for corn or potatoes, or any other crop, should be plowed in the spring, we have many scientific and practical men who will correspond to the fact. One man will advise me to plow my green sward almost the first thing in the spring, as soon as the frost is sufficiently out to admit the plow, and advances all his judicious and stable reasons for so doing. Another advises to delay plowing until a day or two before the planting, and delay planting as long as possible, that you may have a good crop of grass to turn in, which will serve as a crop of manure. In illustration of this principle, when I was traveling, the last summer, through the state of Massachusetts, in the month of August, I fell into conversation with a gentleman, who remarked that a friend of his recommended to him some potatoes of an extraordinary quality, and offered him some of them to plant; but he declined the offer, remarking that he had occupied all his ground, and used all his manure; and also, that being then very late in June, he doubted whether they would come to any thing, if planted. His friend replied that if he had a piece of green sward that he could spare, to do as he had done, viz: to turn the turf over as evenly as possible, and drop the potatoes in every other furrow while plowing, turning the sod directly upon the potatoe; the vegetable matter in the sod, by its decay, answering the purpose of a coat of manure. He performed the experiment as recommended, and was so well pleased with the present trial that he ordered his men to obtain twelve bushels more and plant them in the same way. This conversation was about the 17th of August, when he informed me that the vines had completely covered the ground, and that he never saw a more flourishing field of potatoes any where in his life. The soil is a dark, gravelly loam, somewhat inclined to clay.

Another scientific and practical agriculturist, equally wise in his own judgment, tells me by all means to turn over my green sward in midsummer, immediately after haying, for a crop of corn or potatoes on the following season, and in the spring cross plow and harrow, which will make your field as easy to cultivate as one which has been plowed two or three years.

Still another says, there is but one time only when grass lands should be turned over, and this should be the last thing done on the farm in the month of November. Plowing at this season has many advantages; the team is in a better condition for plowing at this season than any other; it is a time, too, when the farmer can plow the most ground at the least expense; and also that by plowing at this season, the action of the frost upon the soil tends to pulverize and make it mellow for cultivation.

That this subject, or, when is the best time to plow grass lands, with the greatest amount of economy of time, labor and manure, or capital, to the cultivator, is attended with many difficulties to be answered, I am fully aware. Almost every farmer has as many different kinds of soil to plow and cultivate as he has crops growing; and as one kind of soil will not produce good wheat, while another of a different quality will bring it to perfection, so I believe that the right time for plowing one kind of soil does not follow as a consequence the time for plowing all kinds of soil. Hence the following: 1. When is the best time to plow dry, gravelly soils for a crop of corn or potatoes, with the greatest profit to the cultivator, from the least expense of time, labor and manure? 2. When is the best time to plow moist, heavy, gravelly soils, with the greatest profit, from the least expense, &c.

The science of agriculture has, in my opinion, advanced to that state in which its different branches, like that of plowing, should be tested by actual scientific experiment.

I have advanced these opinions on this subject, Messrs. Editors, that I may, if possible, through the medium of your agricultural journal, induce some one, if not many of its useful and highly intelligent contributors to advance their opinions, practice and experience on this subject, that thereby I may enlighten my own mind, and that the result may be the means of usefulness to many of our intelligent and practical farmers. Yours, &c.

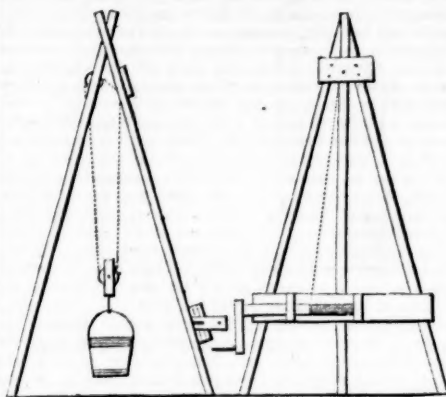
YANKEE FARMER.

New-York, Sept. 20, 1843.

WIND MILLS.

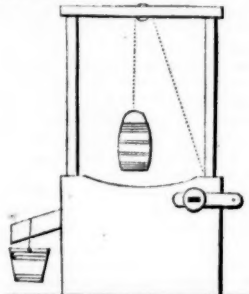
MESSRS. EDITORS—Will you or some of your correspondents who are acquainted with wind mills, furnish through the Cultivator such a description of the most simple and effective horizontal wheel, as would enable an ordinary mechanic to construct one. In all sections of the country, which are, like the prairie regions of the west, destitute of running water several months in the year, I think wind might be employed to great profit in raising water from wells for our cattle. To draw water daily for a large stock of cattle is no trifling task. And why might not a horizontal wheel, revolving over a barn, furnish power to impel the threshing, straw cutter, &c.? An answer to the above will doubtless be acceptable to many of your western readers as well as myself. P.

Bowling Green, Wood co., O. Sent. 1843



GIN, FOR RAISING EARTH FROM A WELL.—(Fig. 87.)

MESSRS. EDITORS—I send you a sketch of two simple machines, one of which is commonly called a gin, (fig. 87.) and is a convenient machine for raising the earth from, and lowering the stone into a well, and for a variety of other purposes. I have given two views of it, that all parts may be so distinctly seen that any man may construct one. It may be constructed of three round poles or joists ten or twelve feet long; two planks should be firmly pinned upon two of the joists, one about three feet from the bottom, upon which the windlass is secured by means of two short pieces of plank, crossing the first mentioned one at right angles, and secured to the same by pins. The upper plank is pinned upon the joists near the top, and secures the joists at such a distance from each other as to admit the third one between them; (one end of the rope is also secured to this plank;) a strong pin is put through the three joists at the top, upon which they turn and admit of being spread more or less at the bottom. There is one pulley fixed in one of the joists near the top, and one moveable as represented. They may be 4 or 6 inches in diameter, as most convenient; the size of the pulley has no effect upon the power of the machine. Fifty pounds of force applied to the crank, will be sufficient to raise four hundred lbs. weight, admitting there is no friction, and the crank is 16 inches and the shaft 4 inches.

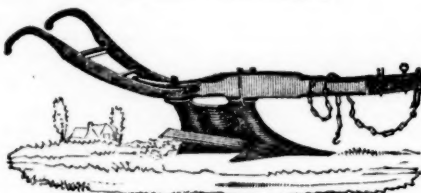


Windlass for raising Water from a Well.—(Fig. 88.)

The other machine is a windlass for raising water from a well, for domestic use, and is so simple as to need no explanation; it is simply a crank and shaft with a rope passing over a pulley. A small friction lever may be placed upon the top of the shaft and pressed down by the hand, to prevent the bucket from descending too rapidly. The shaft may be 4 inches, and the crank 10 inches. By means of the pulley, the bucket is kept in the center of the well, and is not liable to be beat against the sides. The shaft is also placed upon one side of the well instead of over the center, as is the case when no pulley is used.

DIXWELL LATHROP.

La Salle co., Ill., 1843.



PROUTY & MEAR'S NEW AND IMPROVED SUBSOIL PLOW.—(Fig. 89.)

THESE plows are light in their structure, simple in construction, easy in draft and management, adapted to a common team on common farms, viz: for two or four horses, or oxen, and efficient in operation. The weight does not exceed that of the common plow. Simplicity is here simplified, until it is brought within the range only of that lateral and vertical variation accessory to the adjustment of the instrument to the travel of the team, and the depth at which it is to operate. The fact that No. 2, working at the depth of 12 inches, after a light span of horses, driven and held by a boy, for a whole day, with ease to himself and team, and the work per-

formed in such a manner, as to call forth the unqualified approbation of numerous intelligent farmers, is conclusive as to ease of draft, &c. The ultimatum as to strength has not yet been reached, even by powerful teams. (See advertisement.)

Philadelphia, Oct. 12, 1843.

D. O. PROUTY.

TOMPKINS COUNTY FAIR.

MESSRS. EDITORS—The annual Agricultural Fair of this county came off on the 28th and 29th ultimo, attended with sunny weather and a multitude of spectators unprecedented on like occasions. The stock, of all kinds, exhibited was not as numerous as usual, but far better in quality, especially horses and cattle. Among the latter was a two year old half blood Short Horn bull (crossed with a Leicester,) owned by Mr. J. R. SPEED, and bred by the indefatigable corresponding secretary of the State Society, Col. H. S. RANDALL, whose beauty of outline approached so nearly to the full bred Durham as to deceive many, and which proved most conclusively the skill and good taste of the breeder, as well as extended the reputation of his fine herd. A number of half blood Short Horn heifers were exhibited, which tended more than ever to impress our farmers with the superior excellencies of this favorite breed, and will doubtless result in immediate steps with many to more extensive improvement of their native stock. So recent has been the introduction of Durham stock into our county, that few comparatively as yet have availed themselves of it; but those who have, and exhibited the cross, I hardly need say, ran away with the chief prizes. An extraordinary 3 year old heifer, of native breed, was shown by Mr. CHARLES MORRELL, pronounced by several who were at Rochester to be quite equal to any thing of like age exhibited there. This animal indicates Durham descent, not only in form, but propensity to fatten, as she is now in high flesh, although her calf has but recently left her side, was never fed a quart of grain of any kind, and her pasture during the present season but ordinary. Her weight, while suckling her calf, was nearly 1300 lbs. The sire and dam were of native stock, and only mediocre in every respect; and my sole object in introducing her to your notice, is to impress upon our farmers the necessity of practicing the utmost vigilance in selecting only those animals which embrace the most numerous points of excellence to breed from. This heifer is clearly an accidental; at a single bound she has gone back, no one knows how many generations, and exhibits the excellence of some one of her progenitors. It might have been otherwise, and thereby shown glaring defects instead of beauties. This propensity with animals as well as with the human family, is by no means rare. Indeed, a striking instance was presented on the day of the Fair, in the cow belonging to the president of the Society, Mr. WOOD, which took the first premium as to form, and a very perfect animal she was, yet had one of those ill formed "pumpkin-rumped" calves by her side, and has produced several of them, although no bull has been used of that breed! In conclusion, let us all beware, and breed from such stock as partakes most of general excellence, as from so doing general excellence can only be secured with uniform certainty in all after generations.

Of swine, the Berkshires took the prizes, of which there were some capital specimens, quite equal to those exhibited at the State Fair, having originated from some of the best stock in the state. Some very good Merino sheep were exhibited by Mr. J. R. SPEED, and a lot of Saxons by Mr. A. C. ROYER; a ewe among the latter would have been hard to beat anywhere. The wise discrimination, this year, of manufacturers, in their wool purchases, will call out more of this heretofore neglected breed at our Fairs hereafter.

Though last, but by no means least, it affords me great pleasure to notice the full bred Short Horn bull, "Remus," at the exhibition, purchased at the late Fair at Rochester by the Hon. E. MACK and Messrs. C. L. GRANT & GODDARD of Ithaca. He was bred by that man who has a heart as noble and big as himself, and who has, by his kind and urbane deportment, won the hearts of every member of the State Society: I mean ADAM FERGUSON of Canada. He is four years old, roan, and pedigree pronounced very good, which I regret having lost, otherwise would here present it in part. He is not as "well set up in the tail," (as breeders say,) as many others I have seen, but in nearly all other respects he is a very good animal; and the word of Mr. Ferguson has been passed, which is that of a man of unimpeachable veracity, "that all his stock gettings are very fine." From the fact of his having been so recently introduced into the county, he was not considered by the committee as eligible for a premium. This enterprise on the part of the above gentlemen is highly commendable, and will result most beneficially to the county, as I understand quite a large number of farmers have already signified their intention to avail themselves of Remus' services.

I regret to say that the in door exhibition was not as attractive as last year; yet, judging from personal observation of like exhibitions elsewhere, it would compare favorably with those of the most favored societies in the state. The fruit generally, and peaches especially, grown by Mr. JULIUS ACKLEY of Ithaca, were superior to the Rochester display; and of carpeting of all kinds, as well as harness, saddles and trunks, besides many other articles of the useful, are rarely surpassed. What the exhibition lacked in attraction, chiefly, was the or-

amental—embroidery and fancy needle work, a display of which was made last year, which reflected greatly the fine taste and industry of our farmers' daughters. A piano made in the county was presented, and pronounced by qualified judges to be quite equal in tone and finish to the average of those made elsewhere; besides several well executed oil paintings and pictorial engravings, by artists of Ithaca. I had proposed some observations on the great importance of these in door exhibitions, but want of space will compel me to defer giving them until another time.

Although a large proportion of the farmers returned to their homes on the evening of the first day, yet very many returned to participate in the proceedings of the second, which went off with spirit, and not a little of enthusiasm. Five teams entered at the plowing match, and although all exhibited good work, yet the prize was won by the *Southard plow*, as yet "unknown to fame," beating two other teams attached to the celebrated Livingston county plows. This was a decided triumph for Mr. Southard, who is a native of the county, quite a mechanical genius, and his improved plow is the result solely of his inventive powers.

Early in the afternoon a procession was formed and marched, attended with a band of music, together with the intrepid fire companies, in their showy costumes, and drawing their beautiful engines, to the Methodist chapel, to hear the address, which was delivered by Mr. J. J. SPEER, Jr. of Ithaca. The orator had himself been a practical farmer, and in changing his profession, he acknowledged he had taken a "Paddy hoist, and jumped two pegs lower;" that in his estimation no avocation could be more exalted and reputable than that of farming; but however reputable it might be, yet he regretted to say that that independence which should be its concomitant had been latterly too much sacrificed by the extravagance of farmers generally; that too many, instead of holding aloft their heads like independent farmers, and indulging in no fear of looking any man and all men in the face, they skulked behind corners and by streets to avoid their needy creditors; hence he urged us never to buy beyond our capacity to pay whenever the creditor demanded his just dues, and especially never run to a bank to borrow, as bank officers were the most superstitious of all men, being rigid observers of set hours and days, and demanded equally rigid observance on the part of those who worshipped at their shrine. The importance of bestowing more attention in making and judiciously disposing of manure, was forcibly shown; that a contrary course would, as it has in a thousand of instances, impoverish our farms and ourselves, and compel to the west, where very many have the poor privilege of working four hours of the day, and shaking with fever and ague the other twenty. He drew a humorous picture of the slattern farmer, who, among other items, permitted his pigs to trespass within his door yard, nay, within his dwelling, and thereby to sour the temper of his amiable half, to breed dirt, discontent and misery, where only should be cleanliness, therefore health, sweet tempers and cheerfulness, therefore happiness. My space will not permit me to notice any further the well chosen topics of this address. After it was concluded, the reports of viewing committees were read, and officers of the Society elected for the ensuing year.

Thus ended the fourth agricultural exhibition of Tompkins county, with a unanimous feeling that we have effected much good, and the future is full of promise of effecting still greater.

I had intended to have accompanied this with a notice of an agreeable visit to Owego, to attend the Tioga Fair, but must defer it to another time. Your friend,

L. A. MORRELL.

Lake Ridge, Tompkins co., Oct. 2, 1843.

LETTER FROM IOWA.

MESSENGERS. EDITORS—The farmers inhabiting "Northern Iowa," have harvested a heavy crop of wheat, free from either rust or smut. In the southern portion of the territory, however, the wheat was mostly "winter killed." Notwithstanding the severe drouth through June and July, the August rains will produce good crops of corn, potatoes, &c.; hemp will not, however, be so good.

From recent observations, I am satisfied, that there is no region of country in the United States, better suited to the raising of sheep than Iowa. In fact, we have a great country; one of the noblest rivers in the world wash its eastern border for 650 miles, the Missouri river on the south, the St. Peters on the north, and numerous tributaries intersect the country, which furnish water power in great abundance. There are some beautiful cascades in the interior. We have a rich soil, a salubrious climate, numerous springs, and the earth contains her endless stores of minerals.

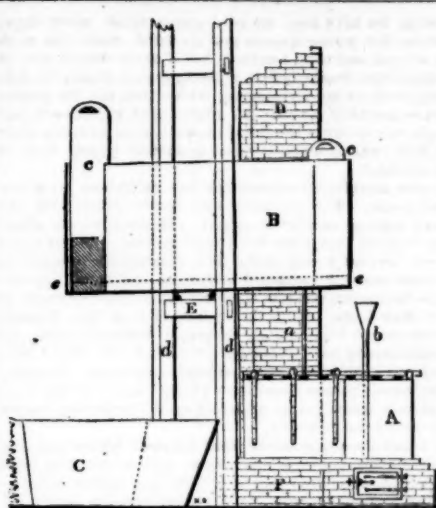
Wild plums, apples and cherries, are large and abundant, and the fruit of the oak seldom fails. And as the doctors say, it is "distressingly healthy."

Send us on some of your enterprising men, however poor they may be in regard to dollars and cents, provided always, they have capital in the shape of industry and perseverance. A man who cannot support a family in Iowa, should be expelled from either hemisphere or translated to the moon.

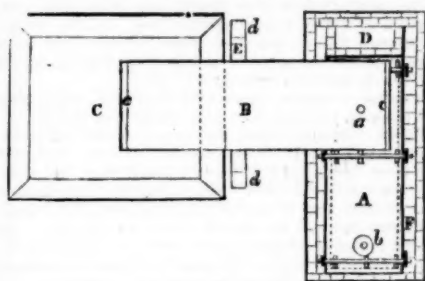
I know of no commodity, wares or merchandise, that go off with such rapidity as do girls; and a married lady coming to our territory, should always bring along at least one single sister, or sister-in-law.

Dubuque, Iowa, Sept., 1843.

JOHN KING.



Elevation.—(Fig. 90.)



Ground Plan.—(Fig. 91.)

References.—A. A. Boiler—B. B. Steam Box—C. C. Vat—D. D. Chimney—E. E. Cross piece between stanchions, on which the steam box rests and turns—F. F. Arch.

a. a. Conductor—b. b. Feeder—c. c. Shutters which slide in grooves—d. d. Stanchions—e. e. False bottom to steam box.

MR. FIELD'S ROOT STEAMER.

MESSENGERS. GAYLORD & TUCKER—At the earnest solicitation of Mr. Arnold Field, before his death, I have made a drawing of his Root Steamer, which he had used for the last five or six years with such perfect success, that he was desirous for the benefit of pork growers generally, his system of cooking food for fattening pork should be known; and at his request, I enclose the drawing with a description, that you may exercise your judgment on the same, and publish it if you deem it worthy of notice.

I observed in the last number of the Cultivator, a plan of a root steamer, which in some respects must be inconvenient; one in particular, in taking the roots from the steam box. In the plan before us, this is remedied by the box being on hinges and easily turned, and its contents emptied into a vat, to be mixed with meal, &c. The boiler as well as the steam box is made of two inch plank; the boiler bottom is made of sheet iron, for which cast iron may be easily substituted; but sheet iron one-sixteenth of an inch, I think is far preferable. The drawing is made on a scale of one inch to four feet, which makes an apparatus of sufficient size for the use of most of farmers. The steam box containing about 15 bushels, which, when the steam is up, can be steamed in fifteen or twenty minutes. The building to contain such an apparatus, should be built one and a half or two stories high, as the steam box is filled from the second floor while standing in a vertical position, and then turned down and rests upon the conducting pipe, which is made of wood. The feeder is also made of wood, and attached to the boiler in such a manner as to run to within half an inch of the bottom, to prevent escape of steam, and through which water is conducted to the boiler. The water is drawn from the boiler by means of a tube and stopcock. The boiler should be placed over the arch in such a manner as to prevent any fire or extreme heat coming in contact with the lower edge of the box, as is represented by dotted lines in the horizontal projection. A board one inch thick is made fast two or three inches from the bottom of the steam box, in which numerous half inch holes are bored, in order that the steam may be equally distributed throughout the mass. The steam box should be a little inclined, that the water which is condensed may run out.

The drawings are made on the plan of horizontal and vertical projections, which may be easily understood by considering the eye above the apparatus in the horizontal projection or plan, (fig. 91.) and in front in the vertical projection or elevation, (fig. 90.)

The total cost of the above described apparatus did not exceed twenty dollars, and may be built much cheaper.

Very respectfully,

H. B. FIELD, U. S. Army.

New Berlin, Chenango co., N. Y., Oct. 12, 1843.

THE FARMER'S MANUAL.

A Practical Treatise on the Nature and Value of Manures, founded from experiments on various crops, with a brief account of the most recent discoveries in Agricultural Chemistry. By F. FAULKNER, and the author of "British Husbandry;" 153 pages 8mo: published in New-York by D. Appleton & Co., 200 Broadway, and in Philadelphia by George S. Appleton, 148 Chestnut-street. Price 31 cents, or bound in cloth, 50 cents.

THIS is a cheap reprint of a recent British publication on that branch of agriculture which relates to manures, as well as to discoveries in the science of this most valuable art. Whenever a business or employment is carried on without knowledge, order or system, it is unskillfully managed, and generally unproductive. Such has frequently been the case in agriculture, but the doubts, the mistakes and the losses have awakened farmers in Europe and in a portion of the United States to their true interests, the study of the sciences connected with their art. Hence we find an increase of publications on agriculture; and the one recently published, whose title we have given above, is very valuable to the farming interest, because it is cheap and concise, and is not so much encumbered with learned and technical phrases as some others which have been published. The author divides his subject into three parts: 1st, animal and vegetable manures; 2d, mineral and artificial manures; 3d, on the management and application of manures. The first part is divided into six chapters, the second into five, and the third into twelve; from every one of which the practical farmer may take some hint or reap some real advantage.

We first opened the book with some prejudice, as our eye caught the title, "THE FARMER'S MANUAL," directly over which, on the margin of the cover, were the words, "Muck is the mother of money." Here we thought was some quackery, or some plagiarism from the publication of our countryman, Dr. Dana, by an alteration of the title of his work, "A Muck Manual for Farmers." But as we proceeded in the perusal of the volume before us, we became more and more interested, and found that though treating on the same subjects with Dr. Dana, it was done in a different manner, and easier for the reading farmer to comprehend.

The object of the treatise is said to be "to explain the nature and constitution of manures generally; to point out the means of augmenting the quantity, and preserving the fertilizing power of farm yard manure; the various sources of mineral and other artificial manures, and the causes of their frequent failure."

We found, too, that the author of the "Farmer's Manual" used the word "muck" in a different sense from Dr. Dana. Our countryman means, by muck, the black sediment of ponds, swamps and peat bogs; while Mr. Faulkner means by the same word the barnyard compost, consisting of various animal and vegetable substances, mingled with such earthy and saline ingredients as are known to add value to artificial and barnyard manures.

We were pleased that the Farmer's Manual had preserved the word *humus* and its general acceptance among farmers, instead of the uncouth term "geine" employed by Dr. Dana, a word derived from the Greek language, and difficult to pronounce. The term *humus* has been in use among agricultural and periodical writers so long, that farmers have become familiar with its sound and meaning; and we hope that Dr. Dana, in the next edition of his "Muck Manual," will restore it and abandon "geine," as it is difficult to fix the pronunciation of this latter word, and whether it be of one syllable, pronounced as *gine*, of two syllables, as *ge-ine*, or of three, as *ge-i-ne*.

In countries which have been ages under cultivation, crops cannot be profitably raised without manure. The author of the Farmer's Manual on this subject advises the following course:

"To increase the quantity of manure raised on the land, should, therefore, be the constant aim of every farmer; every portion of apparently refuse vegetable and animal matter should also be carefully collected and added to the dung heap, and in this manner it is inconceivable what additional quantities of excellent muck may be produced." (Page 24.)

This muck or barnyard manure requires the attention of every farmer, and our author says that "in the management of farmyard manure two primary objects present themselves: first, to prevent waste of every kind; and secondly, to increase the quantity of dung by every means in the farmer's power. The waste is effected in the manner before alluded to, by unnecessary and excessive fermentation, by which the organic parts are dissipated in a gaseous form, and by suffering water to run through the dung, by which the inorganic substances, the salts, are carried away in solution. No dung should be allowed to ferment until a few weeks before it is put into the soil, and then only in that slight degree as to render it manageable, and to facilitate its decomposition when in the soil." (Page 69.)

If heretofore there has been a want of care in the management of farmyard dung, it is no reason, our author thinks, (p. 75,) why that negligence should continue among farmers of the present day. Hence, if a cultivator of the soil turn his attention to the subject of manures, he can, by directions contained in the Farmer's Manual, increase both the quantity and quality of his compost or muck (in the author's sense,) to a great extent. The author thinks that such compost is preferable

J. WELLS.

Second section

- ### Section III.

- Section IV — *Supplementary Articles.*

held by ABBETT & Co. of Baltimore, and for the northern and eastern states, viz: New-England, New-York, New-Jersey, Pennsylvania and Delaware, by GEORGE

BOMMER of New-York, who keeps his office at 75 Greenwich-street. Farmers living in the northern states who desire to buy the true method, are invited to send to my office or to my agents. The only agents established by me, and who are authorized to sell my patented method, are Messrs. ELI BARNETT at Westville, Connecticut, general agent for the New-England states, and H. D. ROBINSON at New-Brunswick, New-Jersey, principal agent for the state of New-Jersey.

All agents hereafter appointed will be announced in the newspapers of the respective counties and states. Principal agents who may appoint sub-agents, are bound to give notice to the agricultural public through the press. Whenever this announcement is not made, the farmer should be on his guard not to be duped by counterfeits, (who have already arrived,) and who will not fail to offer them false methods for their good money.

To facilitate the circulation of my method, a register is opened with each postmaster, where farmers, who have the intention to buy it, can subscribe. These postmasters will address every month a list of subscribers to my office, or to my principal agents in the respective states. The postmasters will receive, in the course of the next month, instructions for their guidance under the circumstances.

Every subscriber who, having paid the price, should not receive the method in due time, will please notify me of the delay, (at 75 Greenwich-street, N. Y.) when it will be immediately attended to.

Farmers, take notice that *Mr. H. Heermance of Kinderhook is not my agent.*

In order to prevent the frauds and to counteract the manoeuvres of some rapacious individuals always ready to invade the rights of others, I will serve them up to the agricultural public, as they present themselves; and in this, I count upon the support of the press, who are also interested in denouncing to the public those who meditate injury to them.

Finally, it should be known that all copies of the method for the northern and eastern states are signed and sealed by myself, and those of the southern and western states by Abbot & Co.; that any method embodying our instructions, which should be circulated under any other name, will be considered as false and counterfeit, and that those who make use of it will be prosecuted according to law.

Those who desire to buy the right for a state, or for one or more counties within my limits, can address me at my office, or my principal agents in the different states.

All editors of newspapers who have more than 400 farmer subscribers, by inserting the present article entire, and accompanying it by a small editorial article, shall have a right, with a copy of the method, to its fullest extent, with the privilege of ceding the right to any of his friends, if he should not himself be a farmer. To be entitled to the above privilege, he will address to my office the journal which contains the insertion in question, and the method will be immediately forwarded. If the editor intend to cede his method to another person, he should inform me, post paid, and send me the name and residence of the person to whom he wishes to cede it.

GEORGE BOMMER.

New York, Sept. 13, 1843.

SHEEP ON THE PRAIRIES.

MESSRS. GAYLORD & TUCKER—I beg to oppose Mr. Jewett's conjectures on the subject of "growing wool on the prairies," by the results of a few years' experience. I have been engaged in growing wool in a small way for twenty years, in the hilly and mountainous region of eastern New-York. There my sheep did well; here I think they do better. The quality of the wool is improved; the quantity is increased.

I have found no evil resulting from Mr. Jewett's great objection to our country, that it is "generally level." On the contrary, this feature of our region is favorable to a free circulation of air, sweeping away (if any) those annoying insects and dispersing the deleterious miasma of which Mr. Jewett complains; thus furnishing a "lodging ground" where the sheep can breathe the "free and pure air," without subjecting them to the extra labor of climbing the hilly eminence or mountain top for that purpose.

Mr. Jewett's second great objection is, "that their winters are not so severe as with us." I know nothing of Vermont winters, although I have heard of "fearful storms" there, but I have seen some fifty winters in the highlands of New-York; yet have I never known such general uniformity of the seasons, summer and winter, spring and fall, as I have experienced here, including the winter which Mr. Jewett's information tells him "held out five months longer than usual." Could Mr. Jewett see our millions of acres of unoccupied prairie, covered with luxuriant herbage, affording the best of pasture and hay, which is annually given to the flames, he would have no fears of "overstocking" for long years to come; when, however, that arrives, we too, I trust, shall be able to point to our fields redolent with the sweets of white clover. Nor have I experienced much loss from wolves—less than 3 per cent per annum. The large mountain wolf of the east is unknown here; the cat-like prairie wolf is a small, cowardly thief; singly, they rarely attack a flock of grown sheep. They are mainly troublesome in stealing lambs, and that risk is constantly lessening. As sheep increase, wolves disappear; they have no mountain fastnesses to which they can retreat.

I have no experience with which to oppose Mr. Jewett's second class of objections, viz: those growing out

of the distempers that may prevail among our sheep. I can only say that I do not believe our flocks are in more danger of disease of any kind here than in Vermont or elsewhere. I know of no existing predisposing cause, either in the climate or the soil; nor can I perceive any reason why we may not as successfully resist its attacks, when found upon the plains of the west, as when raging among the hills of the east.

In conclusion, I venture the remark, that had Brother Jewett done himself the justice to have first made the acquaintance of the "Great West," had he witnessed our flocks cropping the rich aromatic herbage of our warm, dry, rolling prairies, or quietly ruminating under the umbrageous foliage of the old trees of our "oak openings," if he did not conclude to change the pasture of his own flocks, and himself become a "Sucker," he would have returned convinced that Weybridge in Vermont was not the only place in the world where wool may be grown to advantage.

EDWARD W. BREWSTER.

Little Woods, Kane Co., Ill., Sept. 22, 1843.

NEW-YORK STATE AGRICULTURAL FAIR.

Report of the Committee on Plows.

THE committee on plows would respectfully report, that they have attended to the duties assigned them, which, the Society are aware, were neither few nor small. We have the satisfaction, however, of acknowledging that we were furnished every facility for testing the traction of plows by the competitors, who, we are happy to say, manifested a very laudable zeal in rendering us every assistance in our work; and, although laboring under the strong excitement incident to a competition for the highest prizes offered by the Society, and upon an article most important to the farmer, treated each other and the committee with a degree of urbanity highly creditable to this class of mechanics. We had the use of four dynamometers—one belonging to the Society; one upon the same construction, but a better instrument, furnished us by S. W. Chase of Amsterdam; one of a spiral construction, numbering as high as 1200 pounds, but not sufficiently minute for our purpose, by G. D. Avery of Chenango county; and another, the most serviceable, invented by A. K. Cone, called the "Scale Beam Dynamometer." Mr. Chase also kindly furnished us a windlass and small wheels, ropes, &c., and Mr. Avery, pulley-blocks, measures, &c., which very much expedited the business before us, and for which we would tender them our thanks.

On the morning of the 22d, we were met by a large number of those interested in the manufacture of plows, and proceeded to the trial with the dynamometer. Each plow was drawn by a windlass through a stiff sward, the distance of five rods, and required to cut a furrow twelve inches wide by six deep.

The following plows were tried, and the average of their resistance taken, as indicated by the dynamometer:

Names of Ploughs. Makers or Patentees.	Pounds draft.
American, M. H. Coddington, Bristol, Ontario co.,	330
Cayuga County, P. D. Wright, Rochester,	308
Worcester County, E. Davis, Watertown, Jefferson co.,	306
Diamond, H. Delano, Mottsville, Onondaga co.,	365
Peekskill, T. Mercer, Peekskill,	348
Williamsport, S. W. Hall, Williamsport, Penn.,	337
Montgomery County, S. W. Chase, Amsterdam,	325
do (larger size,) do	372
Opposition, C. Seymour, Lockport,	357
Washington, I. S. Teft, Williamsville, Erie co.,	381
Oxford, Oxford, Chenango co.,	371
Ontario County, R. C. Stiles & Co., East Bloomfield,	431
Veto, I. Waite, Albion,	335
Wyoming County, Hicks & Bailey, Perry, Wyoming co.,	383
Oneida Chief, E. Wilson, Vernon, Oneida co.,	381
Caledonia, P. Elyea, Caledonia, Livingston co.,	346
Middleport, I. Van Broncklen, Middleport, Niagara co.,	439
Engle, (Mass.) Ruggles, Nourse & Co.,	415
Genoa, T. D. Burrell, Geneva,	357
do (shell wheel,) T. D. Burrell,	298
so (Scotch shell wheel,) T. D. Burrell,	325
Locklin Improved, I. C. Fitch, Dansville, Livingston co.,	463
Iron Beam, E. Richardson, Rushnell's Basin,	388
Livingston County, H. Wiard, Avon,	400

We ought here to observe, that some of these plows were of a larger size than others, and their surface draft of course greater, as the Livingston County, Ontario County, and some others. Some of them were highly polished, while others were nearly as rough as they came from the molds. Some were provided with very sharp coulters, while others had merely a cutter upon the shin, which made a very manifest difference. Many of them came unprovided with a gauge wheel, and the difference of draft was so great, with or without a wheel, that those who had not a wheel, borrowed one before they would go through with a trial. Your committee think this point settled in the minds of every one who saw this trial, that a wheel is an indispensable accompaniment to a good plow in sward land, or indeed in almost any other. There was also a difference in the dynamometer, as Mr. Chase's, which was injured after the trial of four or five plows, indicated every ten pounds, while the scale beam, afterwards used, indicated only every thirty pounds.

After we had gone through with a very thorough and laborious trial with the windlass and the dynamometer, we proceeded to try them with a strong pair of horses. Each competitor was allowed to hold his own plow until it run to suit him, and then it was held by one of the committee. We gave them a thorough trial in this way, and proceeded to compare their relative merits as to construction and workmanship, and heard explanations of their peculiar merits from their proprietors.

Having thus obtained what information we could as to their traction, and compared their relative merits as to construction and durability, your committee came to the unanimous conclusion that we could not award premiums as published by the Society. We are not prepared to say, neither do we believe any judicious man would say, that either of these plows were so superior to the others as to entitle it to the large premium of \$50. They were all superior plows, and the more we examined them, the more we were convinced that such a collection was never seen before in this or any other land.

We therefore proceeded to divide the highest premium among the largest sized plows, giving the "Caledonia," P. Elyea of Caledonia, \$25 00
"Wyoming," Hicks & Bailey, Perry, Wyoming county, 15 00
"Williamsport," S. W. Hall, 10 00
The remaining premiums were divided among plows of the second size, as follows:

"American," M. D. & M. H. Coddington, of Bristol, Ontario, \$15 00
"Geneva," T. D. Burrell of Geneva, 12 00
"Montgomery County," S. W. Chase of Amsterdam, 10 00
"Oneida Chief," E. Wilson, Vernon, Oneida county, 8 00
"Veto," I. Waite, Albion, Orleans, 5 00

We also recommend that diplomas be given to the "Iron Beam" and "Peekskill," and volumes of the Transactions to the "Livingston County," the "Cayuga County," and "Diamond" plows.

Your committee also witnessed with great satisfaction the trial of a plowing machine or gang of plows, constructed by Thomas Wiard of Avon, and have no hesitation in recommending it as an article of much importance to the farmer. The facility and great rapidity with which it prepares fallow grounds, plows in wheat, covers peas and other spring grain requiring a deeper covering than the harrow gives, render it a very desirable article to the farmer. We had not only ocular demonstration of its performances, but were shown very high commendations from some of the best farmers in Livingston county. We therefore recommend the awarding of a diploma to Thomas Wiard of Avon, for his gang of plows.

Of sub-soil plows, only two were presented, both of which were thoroughly tested and highly approved by the committee. We believe the sub-soil plow worthy of a trial by our farmers, and an instrument which will do great service in heavy clay lands, and such as have impervious sub-soils. We feel that we could not do justice to either of these plows, by giving them the whole premium. We therefore have awarded to B. F. Smith of Syracuse, (Ruggles & Co., Mass.) \$12, considering his plow superior in workmanship, and that it will do the best work in lighter clay soils. We award to S. McLean of Royalton, Niagara county, \$8 for his sub-soil plow, the construction of which is very simple, is so cheap as to be within the reach of every farmer, and will work its way through the heaviest soils.

In closing their report, your committee would beg leave to suggest that a suitable premium be offered for the best dynamometer. The instruments now in use are very imperfect, and no certain test of the power required in the draft of a plow. Such is the continually varying resistance given by the inequality of the earth's surface, and the obstacles under it, that the index of the dynamometer revolves as rapidly as a weathercock in a storm. We want an instrument not so easily affected, or farther removed from continual fluctuations, which will note in single pounds the average power required in a given number of feet. Yankee ingenuity has evidently not been sufficiently employed in the construction of this instrument; and we are persuaded it needs but little encouragement from your Society, to stimulate it to the production of an instrument which will render the power required in the draft of a plow as easily determined as the power of a locomotive.

All of which is respectfully submitted by your humble servants,

MYRON ADAMS,
C. S. BUTTON,
L. B. LANGWORTHY, } Committee.
R. HARMON, JR.,

Rochester, Sept. 23, 1843.

NEW METHOD OF FILLING ICE HOUSES.

MESSRS. GAYLORD & TUCKER—Croton water and pure ice is all the go in the city of New-York, these temperance times, which induces me to recommend an easy and cheap method of manufacturing and filling a house with ice in a pure and solid state, in the best possible manner for preservation.

This house or cellar designed for ice, must stand near a conductor of water; and the top of the house should be so constructed that it may be moved at pleasure, that the inner part may be as much as possible exposed to the weather. Insert a pipe stem into the conductor, that the water may spin through it at an elevation of seventy-five or eighty degrees into the air, in a direction so that in its fall it may enter the space where it is to remain during the season. This water being cooled by rising in the air, the force of the stream is broken in its fall, and if the weather be sufficiently cold, it will immediately congeal into one solid mass of ice quite pure, and in the best possible position for preservation.

Weybridge, Vt., Sept. 29, 1843. S. W. JEWETT.

GENESEE COUNTY AGRICULTURAL SOCIETY.

THE fourth anniversary was held on the 4th and 5th of October, and was better attended than any previous. The show of cattle was large and very good; the show of hogs superior in every respect to that of the State at Rochester. In sheep and horses we also had a very good show. In the domestic, we were largely in advance of any previous year, and had an exhibition that was really creditable even to old Genesee. The number of voluntary members was larger also than any year before. There is still room for improvement, and I think another year will demonstrate that the people are wide awake.

The plowing match excited, as usual, great interest, and went off very well indeed. An address was delivered by the president, the ability of which you can judge when you read it. It would not be proper for me to speak of it, as I might not do it justice, seeing that I am its author. The Society very kindly tendered me the office of president again, but having been so for four years, I thought the rule of "rotation in office" should be applied. Edgar C. Dibble of Batavia was elected president, J. A. Verplank of Batavia secretary, and F. P. Pendell of the same place treasurer. Eight vice presidents and four managers in each town were also elected.

The society is in a highly prosperous condition, considering the disadvantages under which it has had to labor.

The competition on grain and root crops does not take place until 1st November, at which time the premiums are paid off.

The great good growing out of these agricultural societies begins now to be very manifest, in the increased attention paid by farmers to all branches of their business, and the competition among them apparent at the annual exhibitions. Every farmer feels that he is materially benefited by the opportunity thus afforded for comparing the various breeds and crosses of animals, and judging from actual observation of their value to him. Hundreds of dollars are therefore saved, that otherwise would have been lost in experiments. The same also holds good in relation to farm implements, as none will be brought forward that have not been fully tested by actual use.

Holding the State Fair at Rochester this year has been of great service to the cause throughout the west part of the state. Although the Rochester people did very well, still I must be permitted to say that if it had been at Buffalo, there would have been a much more liberal spirit manifested among all concerned than I saw at Rochester. I only hope that one Fair may be held there, to show the different spirit prevailing in the two cities. Hereafter, wherever it is held, the city or village should be at the entire expense of the yard and fixtures. They can well afford it, and that would be but a small return for the amount of money left with them on such occasions. Sincerely yours, T. C. PETERS.

Darien, Oct. 16, 1843.

RAISING TURKIES.

"A SUBSCRIBER" inquires if turkeys "can be made to lay when they show a disposition to set, by being confined as hens sometimes are." The editors of the Cultivator ask that some correspondent "acquainted with the habits of this fine domestic bird, will reply to this query." It is assuming much to claim an acquaintance with the habits of the turkey, and yet perhaps I can give your correspondent some light; and as I shall charge nothing for it, it may be accepted if nothing more satisfactory should come to hand. I must remark, however, in the first place, that your correspondent's turkeys are certainly very different from the generality of turkeys in this vicinity, if they "never lay eggs enough to set them with." Mine seldom lay less than twenty eggs before they show a disposition to set, and they not unfrequently lay twenty-five or thirty; but as I set the first eggs under hens, I sometimes fall short before I have set all my turkeys. In Connecticut, after a turkey has completed her first laying, by confining her a few days, she will usually lose her propensity to set, and in the course of two weeks commence laying again. There is occasionally an exception to this rule. I have had one case this season, where every effort to destroy a disposition to set was unsuccessful; but it was after the hen had hatched out her brood, and I had taken them from her. She refused to leave her nest, and when shut from it, would set wherever she could find an egg, and for aught I know, she is setting now; for after being driven from "pillar to post" for some 8 or 10 weeks, she took to the fields, and for some weeks past I have lost sight of her. But I intend, another year, to turn this untiring and stubborn "habit" to some account, rather than attempt to destroy it.

A few words to those who wish to succeed in raising turkeys. See that the young ones you intend to keep over are thoroughly domesticated. Learn them to eat out of your hand, to fly upon your shoulders, and feel no alarm when you handle them. You will then have turkeys that will lay in your barn or near your house, instead of wandering off into the fields or woods. But I contemplate some more extended remarks upon this subject at a future time, if I can persuade myself that by doing so I can contribute to the better success of your readers in raising turkeys. I will only say now, to those who desire success in this business, beware of breeding "in-and-in." It will ruin any flock of turkeys in the

course of three or four years. It is possible your Virginia subscriber may trace some of his difficulties to this source.

K. L.

BUCKWHEAT—BERKSHIRE HOGS, &c.

MESSEURS. GAYLORD & TUCKER—The object of this communication is to obtain from yourselves or some of your numerous correspondents, some information in relation to the cultivation of buckwheat. This is a new article of culture in our state, and so far as I can learn, is not planted by a dozen farmers among us. On the 4th day of July, the present year, I sowed upon one acre of land, (from which a poor crop of wheat had just been removed,) a bushel of buckwheat. The soil was very light, and did not produce much more than five bushels of wheat to the acre. Notwithstanding, the buckwheat came up well, and while in blossom looked very promising. I observed, however, that it commenced ripening its seed very early and very irregularly; all the lower seeds maturing while the top continued in flower. Whether this is characteristic of the plant or not, I do not know, as I have never before planted it. Being fearful of its shelling out and getting lost, I felt disposed to cut it some time since, but one of my negroes who is from Virginia, said he was acquainted with the article, and that it would not shell out, as it held the seed very tenaciously, and was even difficult to thresh out.

In consequence I suffered it to remain, and two days ago, cut, threshed and fanned it, when it yielded only two bushels and a half, although I was careful to have it cradled while the dew was on it in the morning, and did not remove it until sunset. Upon examination I found that it had been lost in the harvesting, the seed being thickly scattered over the ground from which it was taken. Please give an article upon the subject in the Cultivator.* That my wheat was sown upon such poor land, I would be ashamed to acknowledge, but it was done by the former occupant of the farm, which has just come into my possession. Should my life be spared, I hope by the instructions contained in your own, and our useful agricultural journals, that this state of things will not continue long.

The dawn of a better system of agriculture has made its appearance in our state, and the imperious necessity of collecting more manure than heretofore, is impressing itself upon most of our planters and farmers. But while the culture of cotton continues to occupy so undue a proportion of time and labor, very little improvement can be expected. More attention, however, is now being paid to the rearing of stock, which is the first step towards a better system. We have the Durham, Devon and Ayrshire cattle; the Bakewell, Leicester and South Down sheep, and the Berkshire hog, with other varieties, and I hope they will prove highly useful in improving our native stock. At any rate, being expensive animals, more care will be taken of them, and thus better management of stock in general, will gradually take place.

The Berkshire hog is most assuredly the best formed, and probably in all respects the most profitable animal of his kind; but they have in every instance that I have known of, failed to attain the weights anticipated. We want a hog which at a year old, will weigh on reasonable keeping, 180 to 200 lbs. net, and in no case have I known one here reach those weights. Now this is very much below what many of your correspondents mention in the Cultivator. The animals that I have seen, were mostly obtained from Messrs. Bement and Lossing, of your city, and I now have some of the stock of the former, but they are small, although they have been kept fat from their birth. We cannot afford to keep our hogs on milk, and therefore do not expect them to attain the enormous weights spoken of in the Cultivator, but we could wish a heavier animal than we find the Berkshire, when kept upon the ordinary food that we can spare them. Hoping I may be able to serve you by extending your subscription list,

I remain yours,

J. W. G.

Greenville District, S. C., Sept. 28, 1843.

* Buckwheat at the north, is grown on dry soils, and usually on those that are so reduced as to be unfit for other crops. On very rich soils, the growth is too luxuriant and does not fill well. It may be sown from the 20th of June to the middle of July; and some years the earliest sown will be the best, in other years the latest sown will be the most productive. No crop appears to fluctuate more with the season, or be more depending on the weather. Hot and very dry weather, about the time of flowering, we have found most injurious. In ordinary seasons it continues to blossom until frost comes, and ripe seeds, green ones, and flowers, may generally be found on the same stem. No crop requires more care in gathering, to prevent loss from the shaking off of the seeds. The time of cutting should be, when the stalk exhibits a good proportion of ripe seeds. To wait for all, would be the certain loss of the earliest seeds, which are the most valuable. Buckwheat should be cut when damp with dew or rain. It may then be set up in small bunches, such as would make an ordinary sheaf of wheat, and the top slightly pressed and bound together. These are allowed to stand singly, until thoroughly cured and dried, when they should be carefully carted, and threshed at once. There is no crop threshed so easily as buckwheat, when in good condition; and the grain has one advantage over most others, in rarely suffering any damage, no matter how much exposed to storms. The product varies much per acre. The average may be from 15 to 25, but the yield sometimes reaches 35 or 40 bushels per acre.

One word as to the Berkshires alluded to by our correspondent. While we have no difficulty in making them reach the weight required by him at the age mentioned, many of our farmers who prefer heavier porkers, have crossed the Berkshires with some of the larger breeds, the Leicester or Hampshire, for instance, and think that so far as size is concerned, they have made a decided improvement. Another thing: if our correspondent will look at the analysis of corn as made by Dr. Dana, he will find that while its fattening properties are unrivaled, its power for forming muscle, or in other words, for promoting growth, are not equal to many other articles of food. At the north, we find it best to give the growth by these cheaper materials, while the corn is reserved for the fattening.

THE FARMER'S ENCYCLOPEDIA.

MESSEURS. EDITORS—We regret to find that an article upon the *Influence of Climate on the Productiveness of Plants*, introduced into the Farmer's Encyclopedia, has caused us to be denounced as entertaining feelings unfriendly to the interests of the Southern states. Very erroneous impressions have been propagated in regard to us by means of extracts and garbled statements made by those who have never seen our work, in which it is explicitly stated from whence the article was taken. Where we are personally known, we entertain no fear of being in the least suspected by Southern men of any desire to do the South the least injustice. To show, however, what little foundation really exists for accusations against us, we think it proper to state that the article which has been complained of was written several years since, and originally published in the American Journal of Geology, by a Southern man, born and educated in South Carolina, and largely interested in Alabama and Mississippi property, in both which states he has spent much of his life.

The position sought to be maintained by this able and unprejudiced inquirer, is, that "the cultivated plants yield the greatest produce near the northernmost limit in which they will grow." He has certainly argued the point with great ingenuity and plausibility, but whether his data are all invariably correct, we will not take upon ourselves to assert, not wishing, at present, to argue the subject. The author is abundantly capable of taking care of himself, should he feel called upon to do so. But we do not think it likely that he will condescend to notice all the communications which have been, or may be made upon the subject through different journals, some of which are from persons possessed of marvelous facilities for discovering treason where this or any other offence was never dreamed of. The question affords an interesting topic for discussion in journals devoted to Agriculture and natural science.

EDITOR OF THE FARMER'S ENCYCLOPEDIA.

Philadelphia, Oct. 16, 1843.

BOMMER'S MANURE METHOD PUT IN PRACTICE.

MESSEURS. GAYLORD & TUCKER—Being a subscriber and constant reader of your valuable agricultural publication, I frequently find there, articles on "Bommer's Method of making Manure." As these articles are chiefly from the pens of agriculturists who have followed this method with entire success, it affords me unfeigned pleasure to be able, on my own behalf, also to bear testimony to the value of this method, and through the medium of your paper, to make the results of my experiments and operations known to my fellow citizens. This I do, both for the sake of bringing before the public the great advantages derived from using the method spoken of, and the benefits insured me by its application, and at the same time in order to render a deserved tribute to the truth.

On purchasing Bommer's method last spring, I immediately prepared a heap in the presence of a few neighbors. I followed strictly the directions laid down in Bommer's book. After the lapse of a fortnight, the heap was opened in the presence of a number of farmers, and our astonishment cannot be conceived on seeing the metamorphosis which had taken place, as we found all those weedy and stramineous materials of which the heap had been constructed, reduced to rich black manure, having an ammoniac smell, much more pungent than the best stable manure. Beholding so surprising a result, the farmers present formed themselves into a public meeting, and in that capacity nominated a committee from their midst, who were charged with the preparation of a Report of what we had seen, to be sent to the agricultural press.

I plowed in this manure into one-half of a field intended for potatoes, and in order to institute a comparison of effects, I put the same quantity of my best stable manure into the other half of the field. The effect on the soil was very nearly the same with both these kinds of manure; but the vegetation on that part of the field which had been furnished with Bommer's manure, was more luxuriant and the foliage of a deeper verdure, which I attribute to the richness of the saline matter which it contains, and which alone preserved the humidity of the soil during the severe drouth of this last season. It is proper to remark also, that in the composition of the "Bommer Manure," I employed simply such doses of the ingredients as were absolutely necessary to insure success in the operation of making it, and if I had increased these quantities, there is not the least doubt that the result of the Bommer manure would have been very far superior to that of any horse manure.

Perfectly satisfied with my experiment and its results, I have put up fixtures near my barnyard for the purpose of preparing large quantities of this manure; and within the last two months I have made three heaps, which have yielded me between 200 and 300 loads of excellent manure. The last heap was composed entirely of 100 loads of sedge grass, nearly dry, with which I intermixed 40 loads of swampy matter, such as exists on my farm. All my outlay in purchasing ingredients to form the lye for this last heap, amounted to between \$20 and \$30, and in disbursing this trifling sum, I have made a heap of manure, which I would not dispose of for \$250.

I shall prepare other heaps of manure before the winter sets in, and those who may be desirous to see me at work and to assure themselves of the truth of what I have said, need only call at my farm, and judge for themselves.

The benefits which I derive from using this method are not inconsiderable. Before becoming acquainted with it, I purchased every year from three to five hundred dollars worth of manure, which I needed over and above that of my own farm yard, for the 200 acres which I have. Now I do not purchase one penny's worth, and I can make double the quantity if I choose. I have the advantage of producing my manure in the sowing and planting season. I can make it more or less strong, more or less fermented, so as to suit the soil and the kind of crop for which I want it; I spread and plow it in while it is perfectly fresh, and consequently in all its strength. These are some of the results experienced by me in using Bommer's method of manuring land.

GERRIT KOUWENHOVEN.

Flatlands, L. I., Sept. 15, 1843.

"ECONOMY OF FARMING."

MESSRS. EDITORS—I have been reading with some pleasure, a pamphlet lately translated from the German, by Mr. Smith, with the above title. It is a valuable work, but I for one wish the translator had used a little more economy and simplicity in the construction of his sentences.

Let me point out to you an example or two of these faulty sentences. Take proposition No. 31, under the head of "How much manure is needed to retain a given amount of fields in a fertile state;" which reads thus—"That any farm may be maintained in the same capacity of production, as much manure is required as it would receive, if all the straw of the grass kind of grain plants, all the fodder which has grown on the field, and for the products taken away for the production of manure, as much in hay and litter were restored, as the increase of weight is less than that which the plants restored have gained in organic matter."

Again, under the same head, proposition 36. "The substance of manure will draw from the soil, through all plants, in an inverse ratio, compounded of the absolute quantity of their similarly formed product, and their relative power to assimilate organic matter."

What think you of No. 36, friend Solon Robinson, of Lake Court House? When upon one of your night trips to mill, please dream upon it, and give us the meaning of it in language which we of the plow can comprehend.

If, in the original, Prof. Burger has laid down his propositions in language as obscure as this, his writings should be accompanied with a commentary, for the benefit of the plain farmer; if, on the contrary, this want of clearness arises from the translator not being familiar with the subject, he would do well to obtain some gentleman having a clear and methodical mind, to simplify the propositions for him.

The book is a valuable addition to our farming library; but gentlemen who write for the many, should remember that the utilitarian reader who is searching after truth, prefers it dressed in its simplest attire.

A SUBSCRIBER.

BROAD TAIL SHEEP.

MESSRS. GAYLORD & TUCKER—The Sept. no. of the Cultivator contains an interesting reference to early American agricultural works, in which no more than justice is done to Judge Peters, the author, as I have heard it said, of the system of building covers over bridges. Judge Peters was not esteemed by any means a good practical farmer; yet, what is much more important than the working example of any individual, he roused a spirit of inquiry—he put the ball of agricultural thought in motion. And if he did not illustrate many important discoveries or improvements in his own practice, he was nevertheless the cause of great advances being made by others.

In the south, the planting states, the earliest and the most powerful impetus was given to agricultural improvements by Col. Taylor, by his essays, originally published in a Georgetown, D. C. paper, under the signature of *Arator*. These papers were on topics of every day's concern, and attracted earnest and general attention. The style was exceedingly involved and obscure, but the matter was original and sound; but a good translation would have rendered them more useful and popular, since it would have brought them within the ready comprehension of the least intelligent reader.

It is stated in the Cultivator to which I have referred, "Public opinion did not, however, second Judge Peters, and the Tunisian sheep are now almost or quite unknown in this country." It is this observation which prompted me to take my pen. That the Tunisian, mountain, broad tailed sheep, as they were carefully designated by Judge Peters, should be nearly unknown, is not to be wondered at by those who are aware of the remarkable fact that they have not been known to copulate in this country. Any one who will examine in the Memoirs of the Pennsylvania Agricultural Society, the engraved plate of the under surface of the tail of that breed of sheep, will at once see the extreme difficulty, not to say physical impossibility of access—the male to the female; and extraordinary and unnatural as it may appear, the fact is nevertheless true, that coition, unassisted, has never been effected, as far at least as I have observed or been able to learn. Two pair at least have been brought to me at different times, by different officers of the navy; yet they did not breed, and all attempts by the process generally but not universally deemed indispensable to the production of a fetus, failed from the extreme breadth and immobility of the tail.

The rams were ardent, and the ewes "nothing loth;" but a breadth has been given by breeding, as I am persuaded, through many generations, with exclusive reference to the tail, that nature has at last said, here your experiments shall stop. Mr. Jefferson, to whom this breed of sheep was sent or given by Judge Peters, I forget which, said that he could never succeed in breeding them on the common sheep of the country higher than seven-eighths degrees of the blood of the imported stock; that in that degree, at the highest, the breadth of the tail presented an insuperable barrier. Nothing more natural than to inquire, in such case, how is it that the breed is kept up in Tunis? for in these matters nature is the universal instructor, and rarely calls on art for a helping hand. I took some pains to inquire, and among others through my late and lamented friend Commodore Porter, a man of genius and of a most inquisitive turn of mind; and he told me that in Tunis, where he had been invited by the Bey to look at large flocks, the head of the shepherd was employed to consummate the work. But as in this country I am not aware that recourse has been had to the same kind expedient, it is obvious that the individuals imported must soon die off and become "almost or quite unknown." But on the subject of the effect of a cross, I have this to say: I was once taken by Col. Powell through the Philadelphia market, and conversed with all the principal sheep butchers, and their experience was altogether in favor of a smart dash of the broad tail blood; and they all agreed that since it had run out, they had not had such early and fat lambs in their market. The fault of the breed was that it was extremely light in the fore quarter; but for mutton, the beautiful point of which, in a saddle, is a broad and flat tail, and for fatness of lamb in the same region, I am persuaded there was eminent merit in the broad tail breed, and that where there is, as there may be in many cases of which we are not aware, any remains of that blood, it contributes to the value of the saddle or the quarter of either mutton or lamb. Had we the blood at our command, to be infused in such degree as might be thought proper, it is probable that judges and epicures would throw a quarter of it into all sheep intended for our own table.

J. S. SKINNER.

Washington, Sept. 30, 1843.

INDIAN CORN—CLOSE PLANTING.

MESSRS. EDITORS—I wish to state to Mr. Physick two or three facts. In objecting to close planting the larger kinds of corn, (see Jan. no. of the Cult.) I did so from the past year's experience. I had an acre of ground, of medium fertility, planted and managed throughout according to his directions. From one-third of the piece the blackbirds pulled about two-thirds of it, and here I had a good yield of corn. The balance was nothing but bunnies, and but few of them. During the present season, I have seen another piece of corn spoiled by close planting. I have observed, however, that land in a high state of fertility, will bear much closer planting than that which is less fertile, and perhaps land may be so highly manured as to do well, planted as close as Mr. P. recommends. I do not doubt his statements respecting his crops, but do not think close planting will answer as a general rule.

Another fact. In 1832, I occupied a garden on the banks of the Hudson, in which were several peach trees, and in that summer several of them died with the yellows. One of the trees that died stood beside the house, at least 20 feet from where the earth was ever cultivated. Where I now live, the yellows is unknown, yet every garden is filled with peach trees, and under most of mine the ground is annually spaded quite up to the trunks. A few trees standing in a grass plat, of the same age with those in the cultivated part, are not half as thrifty and do not bear as well as those whose roots are annually mutilated. Consequently, I cannot think the disease is produced by mutilating the roots. I believe the disease is never known in new countries, till at least one generation of peach trees has passed away.

Bouling Green, Wood co., O., Sept. 1843.

COMPARATIVE EXPENSE AND VALUE OF THE WHEAT AND CORN CROP.

MESSRS. EDITORS—The questions are sometimes asked—Which is the most profitable for the farmer, the wheat or the corn crop? What is the comparative expense of each? And how much land of medium quality can the labor of one man cultivate in a season, of these crops? The object of this paper will be to furnish an approximation to an answer to these queries; I say an approximation, for such is the manner in which we farmers manage our affairs generally; so little attention do we pay to accuracy of detail, and careful note of expenses and labor, that after all, much must be considered as little better than guess work in the best of our estimates. Besides, two farms can scarcely be found, where, owing to facilities arising from location, buildings, and above all, the quality of the soil, there will not be less labor required to produce a given crop on one, than on the other. In the estimates below, I have given the items of expense as they have occurred on a farm of rather stiff loam, in tolerable condition, and affording fair average crops. Labor I have placed as I have paid for it, an average of fifty cents per day, with the exception of harvest, which with me costs a dollar per day. A day with a team, I have counted the same as a man. As to the crops, I have taken 30 acres of wheat and 20 acres of corn, as the base of my calculation; it being by many

supposed that the amount of land stated in either crop, is what the labor of one man and team can cultivate. It is known that one man cannot perform all the work on either of these crops, but can he do as many day's works as either of these crops require? If he can, then by exchanges and good management, he may be said to cultivate the given number of acres.

Wheat—30 acres.

	Expen.	Day's w.k.
1st plowing. Green sward, 1 span horses, 1 acre per day,.....	\$30-00	30
2d plowing. Green sward, 1 span horses, 1 1/2 acre per day,.....	20-00	20
3d plowing. Green sward, 1 span horses, 2 acres per day,.....	15-00	15
Harrowing 3 times, once after sowing, 8 acres per day,.....	18-00	18
Seed 45 bushels, or 1 1/2 bushels per acre, \$1-24 per bushel,.....	54-95	
Sowing six days,.....	3-00	6
Harvesting, \$1-60 per acre,.....	48-00	48
Threshing and marketing 600 bushels, at 10 cents per bushel,.....	60-00	60
Interest on 30 acres, at \$30 per acre, for 1 year and 6 months,.....	95-50	
	\$342-75	194
Deduct value of straw, at \$1 per acre,.....	30-00	
Total cost,.....	\$312-75	
Crop, 20 bushels per acre, 600 bush. value,.....	600-00	
Net profits on 30 acres,.....	\$287-25	

Thus the profit per acre, of the wheat crop, is \$9.57; and the number of days work per acre, 6 1/4 nearly.

Corn—20 acres. Green sward, manured before plowing.

	Expen.	Day's w.k.
Manure, 30 loads per acre; 10 before and 10 after plowing, 25 cents per load,.....	\$100-00	
Hauling and spreading, 2 days per acre,.....	20-00	40
1 plowing, 1 acre per day,.....	20-00	20
Rolling, 3 days,.....	3-00	3
Harrowing, 4 days,.....	4-00	4
Planting, 20 days,.....	10-00	20
Seed, 10 bushels,.....	7-00	
Hoeing twice, three-fourths of an acre per day,.....	28-00	56
Harvesting, half an acre per day,.....	20-00	40
Threshing and marketing 1200 bushels, at 10 cents,.....	120-00	60
Interest for one year,.....	42-00	
	\$374-00	248
Deduct half the cost of manure, as for next crop,.....	\$50-00	
Cornstalks per acre for fodder, \$2.50 50 }.....	100-00	
Total cost,.....	\$274-00	
Crop, 60 bushels per acre, 1200 bush. value,.....	600-00	
Net profits on 20 acres of corn,.....	\$326-00	

Thus the profit per acre of the corn crop, is \$16.27, and the number of day's work per acre, 12 nearly. It may be said the time spent in threshing and marketing, ought not to be taken into the account, when it is desirable to ascertain the labor of cultivation alone. This is true, and if we exclude this time in both cases, we find that it requires 134 days for the wheat crop, or 4 1/4 per acre, nearly. For the corn, it would give 183 days, or 9 day's work per acre nearly. At these rates, one man could cultivate about 35 acres of wheat, and would fall a little short of 20 acres of corn in a season of six months. In forming an estimate of the cost and value of these crops, however, one thing must not be forgotten, and that is, that two crops of corn require only the same time as one crop of wheat, and consequently the profits or the loss must be in the same proportion. The amount of the crop of wheat and corn stated, is about the average yield for a number of years on what may be called well cultivated land, as the phrase goes. A FARMER.

HABITS OF BEES.

ALTHOUGH much has been said and written on the economy of bees, there are still many things pertaining to them not well understood; and it is only by preserving facts, as they are from time to time brought to light, that we may at last be able fully to understand their habits, and to pursue the best mode of management.

Some correspondent of the Cultivator denies the existence of the queen bee, as it is called. It seems to me this man's opportunities for observation cannot have been very extensive, or he would not have made such a denial. The existence of such a bee is not a matter of doubt; the most ample evidence can be had on this point. As to the office, or all the offices of this bee, we cannot perhaps speak so positively; but it is well known that no swarm will do well for any length of time without it; and it is in my opinion equally certain that such a bee is the mother of the colony. There are some who believe in the existence of a reigning or governing bee, but who denominate it a "king." Such people generally consider the "king bee" a male, and suppose the drones are females. I have often examined the drone bees at various seasons of the year, by opening their abdomens, but could never find any appearance of eggs in them. But eggs have been found in what is called the queen bee.

James Rightmire of Knox county in this state, a man of German descent, an old bee hunter, and a close observer, (though of limited opportunities for reading,) states that he has several times found eggs in queen bees that had been killed or injured by accident. He also relates some facts which go to settle the question whether it is the old queen or a young one which leaves the hive when a new swarm comes out. Some expert bee keepers are in the practice of closely watching a hive when it is about swarming, and by securing the queen of the new colony, when she makes her appearance, and

cropping one of her wings, so that she cannot fly, prevent the swarm from going off to the woods, for the bees will not leave their queen. Mr. Rightmire states that several years since, he caught a queen bee at the time a swarm was coming out of a hive, and cropped her wings. He put her into a new hive, and the swarm soon followed her. He kept this bee for five years, during which time she came out with seven or eight new swarms, always coming out whenever the hive she was in swarmed. This bee was at last killed by accident. She came out with a swarm, and being unable to fly, fell on the ground. Mr. R. noticed the confusion of the bees, and went to search for the queen; but she, lying on the grass, could not be readily seen, and he inadvertently crushed her with his foot. She was full of eggs, and but for her tragical end, might have lived to propagate her species for five years longer.

Sometimes there are several queens come out with a swarm. In this case, the swarm is either sub-divided, each queen taking a portion, or as is more frequently the case, battles ensue between the queens, and the right to wield the sceptre of government is decided by mortal combat, the contest continuing until only one remains alive. Mr. Rightmire says he has often witnessed these conflicts, and in one instance knew four queens to be killed in a single hive, before peace was secured. During these battles, the bees seemed in the greatest commotion, doing nothing but running about in the most agitated manner. SANFORD HOWARD.

Zanesville, O., Sept. 1843.

QUEENS CO. AG. FAIR.

MESSRS. GAYLORD & TUCKER—The Queens County Agricultural Society held their Fair, Cattle Show, etc., for the present year, at Hempstead, on the 17th inst., where every thing passed off with much harmony, and the best spirit prevailed among all who assembled to witness the proceedings and riches of the country. There was evidently a decided increasing zeal in the great cause, exhibited upon the happy countenances of the thousands assembled, (thousands I may safely say,) for never before was there such a "gathering together" of the people in Queens co.

The annual address delivered by the Hon. Lt. Gov. DICKINSON, was worthy of all praise. He spoke not of agriculture superficially, as is usual upon such occasions, but as the primary first step in the civilization of man—its pursuits of the most high and noble order—where toil was honorable, and labor successful.

There was about \$350 awarded in premiums richly merited. The day was closed by a sumptuous dinner, prepared by Mr. Anderson, when JOHN A. KING, Esq., in his usual happy manner, welcomed the Lt. Governor to Queens co., and proposed his "future health and happiness." Lt. Gov. D. responded in a very neat, pertinent and appropriate manner, reciprocating the sentiment. I trust to see at an early day, the address published in your highly valued paper, as all should read it.

Oyster Bay, Queens co., Oct. 20, 1843. S. Y.

The Garden and the Orchard.

GOOD FRUIT.

THAT it is just as easy to have good fruit as poor, is a truth that every farmer should remember; and this, if acted upon, will be found not only easy but profitable. If the fruit orchard is deficient in numbers or varieties, lose no time in correcting the evil; and the best way is to apply to some experienced nurseryman for the kinds and quantities most desired. We know that formerly disappointments sometimes arose from orders being filled with trees different from those ordered, or of inferior varieties, but no professed dealer in trees will now hazard his reputation by such acts. Public opinion has corrected the evil. If the number of your trees is deficient, but the quality inferior, take note now of the trees you wish grafted or inoculated, as the fruit is before you and its qualities easily tested. Then during the winter collect such grafts and make such preparations as shall obviate all objections to fruit hereafter. A few good fruit trees of each desired variety is far better than great numbers with inferior fruit. A succession of good fruits is indispensable. The varieties of summer, autumn and winter should follow so as to leave no interval. Enlarge your list of different kinds of fruit, rather than your varieties of the same. Cultivate all of which your soil and location will admit, and you will find your labors amply repaid in the pleasure and profit you will receive.

CULTURE OF THE PEACH.

MESSRS. EDITORS—I presume you will have many commentaries on Mr. Physick's statement and theory about peach trees, in your last number; if so, you will publish whatever you think most useful on the subject. As to the disease called the Yellows being contagious, I have always supposed it was; but have tried no other experiment except the common one of observing that when one tree was infected, other trees standing near would be, unless the infected tree was immediately removed; in which case the healthy trees would generally be preserved. And I cannot understand Mr. Physick as giving any facts to prove the contrary, but only to prove the disease not incurable. Having some years ago removed all my trees affected with the yellows, I have not since been troubled with that complaint.

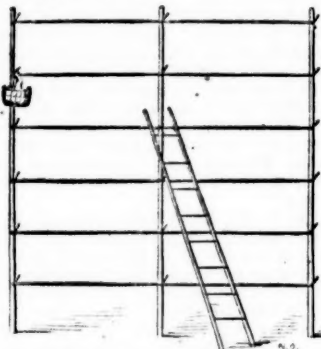
As to peach or other fruit trees being injured by plowing and cultivating the ground where they grow, in our soil and climate, I think facts do not prove it at all. I was always fond of fruit of almost every kind, and peaches were my particular favorites. I came into this part of the country to reside, early in 1801, and have resided here ever since. When I first came here, peaches were very plenty. They were not raised for market, but for the family to eat, preserve, and give to the neighbors and friends, and were almost as sure a crop as potatoes. This continued to be the case till 1810. In December, 1809, there was a very extensive and severe cold freezing turn, which killed nearly all the peaches in this vicinity, and as far west as Lake Erie. Since then, for some cause to me unknown, it has been much more difficult to grow peaches in this part of the country; but no more difficult on plowed land than on sward. I have ever since tried to grow my favorite fruit, but with very ill success. Sometimes I have had one or two trees that would bear a few peaches for a few years, and then die. And for the last ten or twelve years I have not grown a ripe peach, although I had more or less young trees all that time; nor do I think there has been ten bushels of ripe peaches grown in any one year, within six miles of here, during that period; when forty years ago they could be grown in plenty, without any special care or trouble.

I have never attempted to grow peaches in plowed ground, except in some parts of my garden, which I thought succeeded better than sward. I have now several young peach trees, some one, and some two years old, but hardly hope for any fruit from them. It may be said that I have not been thorough enough in taking care of my trees. I have tried all the remedies prescribed, and have succeeded in raising other fruit in plenty. If Mr. Physick, or any one else, can inform me how peaches can be grown hereabouts without very great trouble, old as I am, I will try again. C. BUTLER.

Plymouth, Ct., Sept. 1, 1843.

HINTS IN REGARD TO THE GARDEN.

MESSRS. EDITORS—I have been a practical gardener, and in my practice I have observed any thing which may be deemed beneficial to my contemporaries, you may be assured it will give me peculiar pleasure to advance any thing original. None, I presume, are more fond of originality than I am, where it is likely to give pleasure or profit to myself or others; having been benefited in practice by the suggestions and drawings on various subjects given by your able and obliging correspondents, I regret that it is not in my power to offer something of more importance than fortune at present has favored me with.



Grape Frame.—(Fig. 94).

I will give you a description of a grape vine frame, which is original and my own, so far as my observation has extended. However trifling it may appear, I like it for its economy and simplicity; and when the vast extent of country which is in these United States, is considered, if this frame were made a substitute where all nailed fabrics are used, (even where my observation alone has extended,) how many pounds of nails, and how many dollars and cents might be saved, I will not pretend to calculate. The posts of this frame may be from 10 to 12 feet in height above ground, (fig. 94,) set firmly in the ground, 2½ or 3 feet. Posts measuring 5 or 6 inches at bottom, will be stiff enough. Chestnut saplings answer well. They may be 6 feet or more apart; pins 2 feet apart are drove through the posts in 1½ inch holes, at an angle of 22½° or one-eighth of a circle or more, at the point of juncture of the pin with the post. Length of pins, 6 inches clear of post. Lath or poles are laid on the pins. Such a frame I have in the center of a garden; beneath is a vacant ground plot, which I have had covered with tan, around which is spherical and right lined grass edgings and flower beds. The advantages of this frame are these:—1st. The posts being near together, they will bear a ladder against them for the purpose of gathering fruit. 2d. The pins will answer to hang your basket or other necessities about the garden on. 3d. The fowls will not trouble themselves to fly so high as to take the grapes in a paled enclosure. (They are very troublesome in a post fenced yard of grapes, devouring them nearly all.) 4th. Persons of common sense, little skilled in mechanism, may make this fence as I have done. 5th. The grapes will do as well 12 feet from the ground as 6, thereby saving half the mortgage. 6th, and lastly, it takes no nails, and requires no mortice. Persons who are desirous to have a more ornamental frame, essentially on the same principle, may have the

posts turned with knobs on, and set as tennents in blocks in the ground, thereby saving them from rotting. The posts may be painted green or other colors; round pieces of lath or sawed strips may be let through the center of the posts, equi-distant as before.

A CHEAP BOWER.

Persons who will take the pains to plant the jinnee-creeper* in their garden, or other enclosure of ground, at particular points where they wish shade produced, may in process of time have a very fine thick commodious shade, and an efficient bower, simply by placing chestnut forks around the shrub at intervals, and placing poles on the forks athwart each other, for the branches to lay on. Such a one I have, which forms an impenetrable shade of some ten or twelve feet in circumference; beneath which, I drove pins in the ground, and nailed boards on the top, thus quick forming convenient benches on either side. It will be seen that this mode of constructing bowers leaves the freest possible circulation of air, are quick made, and economical in their construction. JOHN M. HARLAN.

E. F., Chester co., Pa., July, 1843.

PROTECTION FROM MOLES.

MESSRS. GAYLORD & TUCKER—Some five years ago, I had an old garden so much infested with moles that I was compelled to abandon it. I then built a new one. After selecting a proper site, I laid off 1½ acres; dug a trench or foundation, 12 to 15 inches deep, entirely around it, and built a brick wall, one brick thick, best hard burnt brick, laid in strong lime mortar; at every 8 feet, a pillar 1½ brick thick; the main wall two feet high above the surface of the ground, and the pillars four feet on the top of the wall; between the pillars I laid cap, levelled or spall brick, projecting one inch on each side of the wall to carry off the drip; wrought in the pillars two heart pine scantling, 2 inches square; left a hole in the center of the pillar 12 inches deep; dovetailed the end of a piece of scantling 3 inches square, into a heart pine cap 2 inches thick, to cover the pillar, projecting 1 inch all around the same. I then took heart pine paling, 1 inch thick, 4 inches wide, and sawed them through from corner to corner, putting the two broad ends down on the cap brick, so each 4 inches paling fenced 8 inches; the spike ends up; it makes a fence proof against all intruders, well dressed up and painted white. I consider it the most ornamental, durable, and best garden fence I ever saw. Well, stop; all this don't keep out the moles, for they will dive down even 4 or 6 feet, and go under the wall and into the garden; but here comes the secret. I dug down 6 inches below the surface on the outside of the wall, and laid a detached course of brick end ways butting up against the wall, entirely around the garden. Now the moles always rooting near the surface, will come to the wall and dive down to the brick shelf, (which is to be well covered up,) and I have no hesitation in saying will not in 50 years, turn back 8 inches and take the second dive. There has never been the track of one made in my garden since its construction. I pursue the same plan in regard to all out-buildings which I desire to make rat proof; especially the smoke house, which can be done even if the same is a frame house or logs, only underpin with brick or stone, and nail around the outside on the weather boarding, a strip of tin 4 inches wide, or a slanting piece of board.

PROTECTION FROM BUGS.

I commenced this spring as usual, in planting early cucumbers, squashes, melons, &c., which were no sooner out of the ground, than the greatest pest we have, the yellow bugs, devoured them. After trying two or three times, I made 30 or 40 boxes, 10 by 12 inches in the clear, of three-fourths chestnut boards, 6 inches wide; covered the tops with coarse millinet, nailed on with cut tacks; made the hills level with the surface of the ground, and laid on the boxes; as the vines rise, hill them up and lay them over again, till they are nearly ready to run. One crop has already more than doubly paid me. I shall make 70 more, which is as many as I want—will last many years with care. Ten days is long enough to keep them over one set of hills, and they will not cost over 3 or 4 cents per box. I have a great many other little matters to mention, which must be deferred till another time. A. B. N.

Three Otters, Bedford co., Va., 1843.

SHADE TREES.

MESSRS. GAYLORD & TUCKER—I picked up a scrap of newspaper the other day, containing an account of a great fire a few weeks since in Danvers, Mass., a few lines of which struck me very forcibly, and should be generally circulated. It stated many buildings were preserved by very great exertions, and many more by the shade trees surrounding the buildings. Thus an expenditure of perhaps two or three dollars, saved probably as many thousands; comment is needless. I have likewise made another accidental discovery: by setting out the roots of the Mountain ash, or in other words, cutting off the top of the tree near the ground, and setting out the stump, the shoots of which, in three years grew to the height of fifteen feet, and nearly three inches through. As it will soon be the proper time for setting out those beautiful trees, I hope to see some of your citizens in Albany, and the neighboring cities and villages, try the experiment; or if they choose, the whole tree, as nothing can exceed it in beauty for an ornamental tree. It

* Query—Is the plant here designated, the Clematis Virginica which we believe is sometimes called the Virginia creeper?

will likewise be the proper season for transplanting any kind of forest or fruit trees, particularly the sugar maple, the pride of the American forest, or the world, so far as I have seen, for beauty and use. In setting out the maple, I invariably cut off nearly or quite all the top, and if the ground is not wet, am almost as sure to raise them as a hill of potatoes. C. K.

HINTS ON ONIONS.

Messrs. GAYLORD & TUCKER.—The preparation of the ground should not be stirred and made light for this vegetable, so deep as for others with tap roots. Two inches is deep enough to stir the ground, then lay strips of boards in a parallel direction, side by side on the ground, eight or ten inches wide, and leave a space between each board to sow the seed, of about three inches; let these boards remain on the ground until the onions are one-third grown, before they are removed. The advantage of the boards is obvious; it prevents the weeds from growing between the rows, and it aids in getting over the beds in weeding time without disturbing the plants, thus saving about one-half the labor, a necessary item.

To make early Onions.—When the common seed onions are the size of a goose quill or a little larger, pull out all the roots thick on the bed, and lay them by on the grass or ground to dry; all the natural juice that belongs to the top will enter the bottoms and aid in its growth, and in a couple of weeks form a perfect onion about the size of a robin's egg; when the tops are well dried, put them into a bag and keep them frost until the next spring, when they may be transplanted early in beds, for rare-ripes; these will mature early in spring or summer, for the table.

The bottoms of common seed onions, if preserved, will answer to transplant for several consecutive years, to raise seed from. They should be taken up each fall, and put them on to strings, and hang them in a cellar. There are many other curiosities and properties of the onion which your readers may be aware of, that I decline mentioning in this letter. S. W. JEWETT.

Waybridge, Vt., Sept. 29, 1843.

GRAFTING.

The mode of grafting mentioned in the July no. of the Cultivator, is not a new one, and I will name some other methods of applying that principle in practice.

1st. Instead of inserting the scions in a shoot, and bending it down, we may uncover a root under any tree, insert the scion through it as directed for the shoot, and remove it in the same manner.

2d. Where a young tree bifurcates, so as to be in danger of splitting when the tree is loaded with fruit, a scion may be sharpened at both ends, and inserted one end in each branch, which will thus form a connecting limb, and thus effectually guard against the danger. To insert the scion properly, the branches should be spread apart so as to press firmly upon the shoulders of the scion, and if the tree has so much top as to be acted upon by winds, a string should be tied across above the scion, till adhesion has taken place. P.

GRAFTING GRAPE VINES.—In Hovey's Magazine, a simple mode of grafting grape vines is described, which in substance is as follows:—Cut off the vine below the surface of the earth; split the stock as in cleft grafting; let the scion be of one year's wood with two or three buds, make it wedge shaped, and insert it in the cleft; if the cleft does not hold it sufficiently firm, secure it by binding it tight; draw the earth over the whole, leaving the second bud from the top uncovered; take off all sprouts from stock and scion, except one, and train that as usual. We think those who have unproductive, or wild vines, would do well to try this method. The time is after the vines cease to bleed.

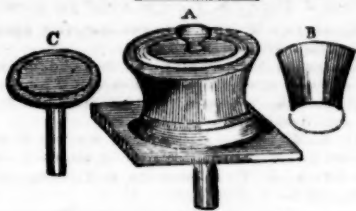
WORMS ON CABBAGE.—These pests of the garden may be destroyed by taking off one of the large lower leaves of the cabbage, about sundown, and laying it on the top of the plant, "backside down." Take it off early in the morning, and the whole or a large part of the worms of that cabbage will be on it, and may be destroyed at pleasure. So says W. Chandler, in the Tenn. Agriculturist.

WOOL.—A letter from the Register of the Treasury to a member of Congress from Vermont, gives the importations of wool for the first half of the present fiscal year, and admitting the last half to equal the first, the importation of wool for the present year, as compared with the last, will stand as follows:

Wool costing 7 cents or under,.....	1,762,736 lbs.
“ over 7 cents,.....	451,924
Total importation for 1843,.....	2,214,660 lbs.
<i>Importations for 1842.</i>	
Wool costing 8 cents or under,....	10,538,988 lbs.
“ over 8 cents,.....	751,384
Total importation for 1842,.....	11,290,372 lbs.
Deduct,.....	2,114,560

Diminution of importation in 1842, 9,075,722 lbs. Will not this extraordinary falling off in the importations account for the activity and better prices of the domestic wool market?—a result most satisfactory, as owing to the competition in manufacture, woolen cloths were never cheaper than at present.

Domestic Economy.



BUTTER STAMP.—(Fig. 95.)

EDITORS OF THE CULTIVATOR.—I lately met with a notice of a method of printing butter, in a little volume entitled "Frank," issued some time since, which if you have not already noticed, might be new as well as interesting to some of your numerous readers. It would seem that the principal advantages of this mode are, that the butter need not come in contact with the hand in any part of the process; and that the lumps when printed, will be of a uniform weight and size. In addition to these, not only the top but the sides may be printed of any pattern to please the fancy.

It consists of a small round box fastened to a board, through the bottom of which, is a hole for the introduction of a handle, connected with a second and moveable box inside the first. This second box is formed of three staves accurately fitted, so as to form a regular mold on the inside. These rest in a groove round the edge of a round piece of wood attached to the handle alluded to, and fitting loosely on the inside of the first box. This handle and top being first put down, the three staves are then placed with their ends in the groove, and the butter pressed down hard into the box. The print is then forced down on the top of the butter, which is afterwards to be pushed out by means of the handle below, when the staves may be taken apart.

The whole of this apparatus, with the exception of the stand, should be neatly turned from some hard and compact wood.

In the above drawing, A. represent the mold with the stamp on; B. one of the three moveable staves in the innerbox, and C. the bottom with the handle. J. C.

PRESERVATION OF APPLES.

In the London Gardener's Chronicle we find the following account of the mode of preserving apples adopted by a gentleman in Herefordshire. We are of the opinion it would succeed any where.

"He covers the floor of his cellar, with hurdles, two in thickness, and on these he puts a little straw, upon which the apples are placed without further care or attention, except removing all that appear to be faulty as he places them in the cellar; and he thinks it is unnecessary to use any particular care in this respect. He has at present, 110 bushels of apples thus heaped up in his small cellar; two or three times a week, he gives a good wetting with fresh water, as much as he thinks will wet the whole of them. This water drains off through the straw and hurdles, into a well. In this way, his apples keep well until the time he usually disposes of them, the best to make him a good return after Christmas. At present the apples look as well and as firm as if just gathered, and I understand that during the last 10 years, they have always kept just as well and as fresh, as now. How much less troublesome and easy, of application for keeping large quantities of fruit, than storing them away in dried sand, on shelves, or in boxes, or in many other ways highly recommended."

EGYPTIAN WHEAT.

The Caledonian Mercury gives one of the most striking proofs of the vitality of seeds, or the length of time their germinating properties, under favorable circumstances, may be retained. In unrolling a mummy in the Thebaid, the hieroglyphics on which proved it to be more than 3,000 years old, or in other words, that it was a cotemporary of the judges of Israel, or Samuel, a few grains of wheat were found in the envelop. On the first of November, last year, Mr. Forl, gardener to the Earl of Haddington, into whose hands a few of these seeds had fallen, sowed them in the garden. The produce was about 100 stalks, nearly six feet high, and from 45 to 55 grains in each ear. The wheat is bearded and thick heads, not unlike barley. The leaves are nearly an inch broad. It is evident, therefore, that the general character of Egyptian wheat was the same 3,000 years ago that it is now, bearded, clubbed, and the grain dark or inferior. The wheat which has been circulated under the name of Texas or California wheat, is a variety of the same kind, but containing more kernels to the ear. One which was forwarded to us, contained 109 kernels. The character of the wheat, however, renders it unfit for fine flour, and our experiments on its productiveness was not favorable to an extension of its culture.

GAPES IN CHICKENS.—A writer in the Tennessee Agriculturist, states that chickens or fowls fed with corn ground coarse, as for hominy, will never have the gapes. It is not improbable such would be the result, and those whose fowls are liable to this disease, would do well to try this manner of feeding. It is only a preventive, however, not a cure.

MONTHLY NOTICES.

NEW-CASTLE CO., DELAWARE.—The Fair of this flourishing Society was held at Wilmington, on the 13th and 14th Sept. It was with extreme regret that we found ourselves unable, from our presence being required at Rochester, to accept the invitation extended to us to be present on the occasion. This was their 7th exhibition, and was in some respects superior to any that have preceded it. Seventy-four yoke of beautiful oxen were present, and attracted the universal admiration of all present, as they were paraded with banners denoting the districts from which they came. The Plowing Match here, as elsewhere, excited the greatest attention—14 teams were entered, all horses but one. The space plowed, one-eighth of an acre. The ox team, belonging to our friend C. P. HOLCOMB, Esq., came out ahead, performing the work in 21½ minutes, the others varying from 23 to 26 minutes. The Report of the Committee on the Plowing Match, of which E. TATNALL, Esq. was chairman, is a pattern for such reports, and we much regret that want of space prevents our publishing it at length. The premiums were awarded, 1st, to John Newlove—2d, to J. W. Andrews—3d, to John More—4th, to F. Lawden. The Society ordered a copy of *The Cultivator* to be sent for one year to the holders of the several plows. The Address by Dr. DARLINGTON of Westchester, Pa., is spoken of in the highest terms, and is soon to be published.

THE AMERICAN INSTITUTE.—The show of stock, implements, farm products, &c. at the late Fair of the Institute, was respectable, though perhaps not on the whole, equal to some of its previous exhibitions. The Short Horns were well represented by animals from the yards of Messrs. Vail, Hull, and others of this state—Dr. Poole of New-Jersey, and Messrs. Whitney and Watson of Conn. The prize for the best bull over two years old, was awarded, as we are informed, to Mr. Vail's beautiful bull "Meteor," by Wellington, out of Duchess, both from Mr. Bates' stock.

TOWN FAIR.—The enterprising farmers of Friendsville, Susquehanna co., got up a splendid Cattle Fair on the 1st of Sept. There were present 300 head of horned cattle, more than 100 horses, with sheep, swine, &c. The Durham breed and its crosses, were predominant, and a couple of bulls, owned by Mr. Carmalt and Mr. Turrell, are spoken of as very superior. We hope this example of the farmers of Friendsville, will be followed, for we should rejoice to see these Town Fairs springing up in every section of our country.

DOMESTIC WINE.—Among the articles exhibited at the State Fair, were several bottles of wine, manufactured from the Isabella and Catawba grape, by E. FAY & SONS of Portland, Chautauque co. Though it might not suit the taste of the drinker of "choice old wines," it was a very good article, and had this recommendation, that it was "the pure juice of the grape."

BOMMER'S METHOD OF MAKING MANURE.—We give place to Mr. Bommer's announcement of a new and enlarged edition of his "Method of making Manure," in our reading columns, notwithstanding it partakes so much of the character of an advertisement, because, from what we have seen and heard, we have the fullest confidence that it is a work of great practical utility, and that by following his directions our farmers may greatly add to, and increase the value of their manures. We would, however, advise no one to purchase it who does not improve all the advantages he now possesses to increase the size and value of his dung heap. It will be of no use to him who by his want of attention or industry, fails to improve to the best advantage, the sources of wealth which he now possesses, because to make manure, even by Bommer's process, requires labor and care; but the farmer who is willing to gather up all those substances within his reach which may be made to enrich his fields, will find in this "Method," information which will materially aid him in converting these matters speedily into a "rich, unctuous and durable manure."

HORSES.—H. C. MERRIAM, Esq. editor of the Farmer's Advocate, Boston, who was present at our State Fair, speaks of the show of horses as follows:—"The horses exhibited were very numerous, mostly descendants of horses imported from England. In this department, the show surpassed that at Albany the last year. About a dozen colts by Sir Alfred, imported into Rochester, by Mr. Thomas Weddle, abundantly proved that our breed of horses may be as much improved by availing ourselves of improvements already made in the mother country, as our cattle and sheep have been. We think the remark is not extravagant, that Mr. Weddle, in the importation of Sir Alfred, conferred upon Western New-York a greater benefit than he could by a direct donation of \$300,000. Horses of this stock are worth at least a third more than the common horses of the country. They are a beautiful dark bay, and from their large size and speed, admirably adapted to the coach and the plow, and are said to be the descendants of the Cleveland Bays of England."

VALUE OF TIME.—From the manner in which time is wasted, it is fair to infer that few are aware how much may be accomplished when what may be called its shreds and parings are fully occupied. The celebrated Frenchman, Chancellor D'Augetseau, had a wife who habitually kept him waiting some ten or twelve minutes, when called to dinner. These minutes, and these alone, he devoted to the composition of one of his works; and in fifteen years, three quarto volumes were produced, which are still admired, and still remain a proof of what men

1 St. Louis-B. & I. R.R.